

TOM
SWIFT
CIRCLING
THE
GLOBE

VICTOR
APPLETON



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THE GLOBE**



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by

VICTOR APPLETON

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TOM SWIFT CIRCLING THE GLOBE

CHAPTER I

A BLAST OF FIRE

TOM SWIFT's father folded up the newspaper he had been reading, made a sort of club with it, and banged it down on his desk with the report of a gun. At the same time the aged inventor exclaimed:

"I'll wager ten thousand dollars my son Tom can do it! Yes, sir, Tom can do it! I've got ten thousand dollars that says he can!"

His face flushed because of the unusual excitement under which he was laboring, but his eyes never flinched as he looked at Thornton Burch, a retired manufacturer of automobiles, with whom Mr. Swift had just engaged in some spirited conversation.

"Do you want to take up that little wager, Thorn?" asked Mr. Swift, friendly enough but very determined.

"I'm not afraid to bet, Bart," rejoined the other, with a tantalizing smile; "but I don't want to rob you. That would be like taking candy from a baby!"

"You're right!" chimed in Medwell Trace, who was associated with Mr. Burch in business. Both were old-time friends of Mr. Swift's. "Better save your money, Bart!" he added, with a chuckle.

"Don't worry about my money, Med!" snapped out Mr. Swift, who, in spite of his age, seemed to have plenty of pep. He went on: "Ten thousand dollars won't break me if I lose it, but I'm not going to. I say Tom can do it, but my saying so doesn't seem to make you believe it. They say money talks, so I'm going to let mine do a little conversing for me. I say again, I'll wager you ten thousand dollars that Tom can do it!"

"Bless my fountain pen, but I agree with you, Bart!" exclaimed Wakefield Damon, an eccentric friend of Tom and his father. "If anybody can turn that trick it's my friend Tom."

"But be reasonable," suggested Mr. Trace. "Granting that Tom Swift has some speedy machines and that he has made good with them in the past, he hasn't a piece of apparatus now capable of speed enough and varied activities

enough, to enable him to make that trip in the time you are claiming he can do it in, Bart. It's impossible!"

"I say it isn't impossible!" replied the aged Mr. Swift. "And to show I'm in earnest I'll wager a second ten thousand dollars with you, Medwell Trace, that Tom can complete the journey inside of the time mentioned."

"Better go slow, Bart," advised Mr. Burch, with a smile. "I may hold you to the wager you made with me. I didn't turn it down. Why do you go to betting with Med before you close with me?"

"I thought I had closed with you," stated Mr. Swift, in some surprise. He had drawn some sheets of paper toward him on his desk and was taking the top off his fountain pen ready to write out a memo of the wager.

"What!" cried Mr. Burch. "Are you making a double bet? With Med and with me?"

"That's what I'm doing!"

"For ten thousand dollars each?"

"That's right!" and Mr. Swift seemed surprised that anybody should doubt his word.

"Twenty thousand dollars!" murmured Mr. Damon softly. "It's a pile of money, Bart!"

"I know it is," agreed Mr. Swift. "But I have more than twenty thousand dollars worth of faith in Tom. I know he can do it!"

"That's right! He can!" burst out the eccentric visitor. "Bless my bald spot, but I'm almost willing to do some betting myself!"

"Leave this to me," begged Mr. Swift. "You know Tom pretty well, for you've been on enough queer trips with him—more than I have, as a matter of fact. But I want to vindicate him and prove that I believe in him, and I'm willing to do it to the extent of twenty thousand dollars."

"All right! All right!" exclaimed Mr. Trace, with a snapping of his fingers. "If you feel that way about it, Bart, put me down for ten thousand dollars. I can use that sum very nicely."

"If you get it—which you won't!" chuckled Mr. Swift grimly.

"Not if Tom can help it!" echoed Mr. Damon. "Bless my——"

But he got no chance to complete one of his odd expressions, for Mr. Swift interrupted with:

"Tom doesn't know anything about it yet. I'll have to call him in and tell him and urge him to get busy and invent a new aeroplane or something, for, frankly, I don't believe he has just the proper piece of apparatus yet to do the trick!"

"Whew!" whistled Mr. Burch. "And yet you're willing to bet that Tom can do it!"

"I know my boy," said the aged inventor quietly.

"Now let's get this straight," suggested Mr. Trace, who had also taken out pen and paper. "You say, Swift, that the hero of Jules Verne's story, who circled the globe in eighty days, was a piker. I agree with you about that as far as the time consumed is concerned. With the perfection of automobiles, oil burning steamers, and fast trains, the journey can be accomplished in much less time than Verne ever dreamed possible. But to say it can be done in twenty days flat is absurd!"

"Then twenty thousand dollars is absurd," retorted Mr. Swift. "And it's the first time I ever heard such a sum so designated."

"Oh, we don't despise the money!" chuckled Mr. Trace. "We'll take it from you willingly enough, Bart, if you are mad enough to persist in this wager. If you had said thirty days you might be within the bounds of reason."

"Considerably nearer the truth," agreed Mr. Burch. "The trip has been made in about twenty-eight days, elapsed time, I believe. But twenty days, Bart——"

"I say Tom will circle the globe in twenty days *flat*—doing it actually within twenty days!" interrupted Mr. Swift. "The only stipulation I make is that he can use as many and

as different means of locomotion as he pleases—that is to say, aeroplanes, seaplanes, motor boats, steamers, or trains.”

“That’s fair enough,” stated Mr. Trace. “I’ll just make a note of that. No use passing up ten thousand dollars,” he added with a smile at his friend. “I’ll never earn that sum any easier.”

“You mean I never shall,” said Mr. Swift.

“Then this seems to be the state of the case,” went on Mr. Burch, who had been busily writing. “I’ll just run over this and we can all sign it if it strikes you as being the terms of the wagers.”

The two friends, Mr. Burch and Mr. Trace, had called for a friendly visit with Mr. Swift one day in the early summer. Some time before, Tom and his father had turned out some machines for these two men in their big shops, and in this way a firm friendship had been started.

Mr. Damon, who lived in the neighboring town of Waterford, had been passing the Swift works and had stopped off for a chat. In some way the conversation had turned on a recent globe-circling event of some United States Naval airmen, who had made what was considered good time.

“But Tom can beat that!” Mr. Swift had

said. "Tom can circle the globe in twenty days flat!"

"What in?" asked Mr. Burch incredulously. "There isn't a machine made than can do it."

"Tom's working on a new machine now," his father had said. "It's a secret, but I don't mind mentioning it to you old friends. I haven't heard him say it is to be used in a globe-circling event, but from what he has told me of it I'm sure it will make fast time, and I'm willing to bet he can put a girdle around the earth, not quite as quickly as Puck, but in twenty days."

"You mean that he will use the same machine all along the route?" asked Mr. Trace. "Why, that's impossible!"

"Not impossible," said Mr. Swift. "Tom's new machine is going to be capable of traveling in the air, on the land, or in the water. I mean on the surface of the water, not a submarine. That would be a little too much. But when I say I'll wager ten thousand dollars that Tom can circle the globe in twenty days, I don't want to tie him down to this one machine. Something might happen to it. If you gentlemen take my bet, it is with the understanding that any machine or machines may be used. The one condition is that Tom, himself, personally, shall complete the girdle of the earth in twice ten days."

"It can't be done!" declared Mr. Burch.

"Never!" asserted his friend.

"If anybody can do it, bless my key ring, Tom's the boy!" voiced Mr. Damon.

So the wagers had come to be laid. Mr. Swift had spoken at first rather rashly and in the heat of excitement. But he was not one to back down, and he listened to the reading of the simple agreement which Mr. Burch wrote out.

"Item," droned the retired manufacturer as he scanned his paper, "a wager is entered into this third day of June to the effect that if Tom Swift can circle the globe inside of twenty days, actual time, in any machine or machines of his own or any make, then I, Thornton Burch, and I, Medwell Trace, agree that we will each and severally pay to Barton Swift the sum of ten thousand dollars. If, on the other hand, Tom Swift fails to circle the globe inside of twenty days flat time, then the said Barton Swift will pay each and severally to the said Burch and Trace the sum of ten thousand dollars."

"Suits me!" exclaimed Mr. Trace, after a moment of thought.

"That's my understanding of the wagers," assented Mr. Swift.

"Then we'll all sign this," suggested Mr. Burch, "and Mr. Damon can put his name down

as a witness and also keep this agreement. There is no need of putting up any money among gentlemen," he added, and this was assented to.

"What about a time limit?" asked Mr. Damon. "I mean the trip ought to be undertaken and finished within a stipulated time."

"We'll say six months from now," suggested Mr. Burch, and, there being no objection, this was written in.

One after another the four signed, Mr. Damon finally as a witness.

Hardly had the last of the fountain pens ceased scratching than there was reflected across Mr. Swift's private office a flash of fire, followed by a dull, booming sound that seemed to shake the whole building.

"An explosion!" cried Mr. Damon, and from without, while the men looked anxiously at one another, a voice cried:

"The works are on fire! They've been blown up! The works are on fire!"

CHAPTER II

TOM ACCEPTS

PAUSING only long enough to lay aside the pens they had been using to sign the strange agreement, Mr. Swift and his friends rushed from the private office of the aged inventor where the talk had been going on.

Silence had settled over the great Swift plant following that booming explosion. But the silence was quickly broken by voices calling:

"Fire! Fire! Fire!"

"Bless my insurance policy, something has happened!" gasped Mr. Damon.

This was so obvious that no one took the trouble to agree with him.

"I hope nothing has happened to Tom!" exclaimed Mr. Swift.

As the four rushed out they were met by Eradicate, an old colored man, a sort of family retainer, who was limping along, trying to forget his rheumatism long enough to keep pace with a veritable giant of a man who, with

Eradicate, was rushing to tell Mr. Swift the news.

"Master's shop—him go boom!" roared Koku, the giant whom Tom had captured during one of his strange trips.

"I seen it same as he did!" cried Eradicate in his quavering cracked voice. "Massa Tom's office done cotch fire!" he added.

"That's bad!" Mr. Swift murmured, as he looked toward the part of the works where his son had his own private place for experiments and tests. A pall of smoke hung over it.

While Tom's father and his friends are rushing to do what they can to rescue the young inventor, something about the hero of this story will be told to new readers of this series.

Tom Swift lived with his father in their beautiful home in Shopton, a town in one of our Eastern states. Tom's mother had been dead some years, and Mrs. Baggert was the housekeeper, and a veritable second mother to the young inventor.

For Tom was an inventor, like his father, and in the first volume of this series, entitled "Tom Swift and His Motorcycle," it is related how he bought Mr. Damon's smashed machine, improved it, and turned it into one of the speediest things on the road.

Tom had many adventures while doing this,

as he had while in his motor boat, his sky racer and other machines by which he ate up time and distance as set forth in the various volumes. It was on one of Tom's journeys to unknown lands in a machine of the air that he had brought back Koku, one of a race of giants, and since then the big fellow had faithfully served Tom Swift.

Just before the present tale opens, Tom, as related in the volume just preceding this, entitled "Tom Swift and His Airline Express," had perfected an aeroplane that could pick up a coach, something like a Pullman car, and bear it quickly through space. Tom established an airline service across the United States, dividing the journey into several laps, picking up different coaches in Chicago, Denver, and San Francisco.

He succeeded after battling with unscrupulous men who sought to hamper his efforts, and he also succeeded against a financial handicap. When almost doomed to failure, however, Tom saved a millionaire, Jason Jacks, from death in a runaway accident, and out of gratitude Mr. Jacks loaned Tom the money to complete and perfect his Airline Express.

The odd machine, an airship with a detachable car, met with favor, and from the proceeds of it Tom and his father gained large sums.

Then, running true to form, the young inventor looked for a new world to conquer and turned his attention to a machine he hoped would move rapidly over the land, like a racing automobile, in the air, like an aeroplane, and on the water, like a motor boat.

Tom had practically completed his plans, and work on the new apparatus was well under way when the visit of Mr. Burch and Mr. Trace occurred, resulting in Mr. Swift's rather rash wager.

"I guess I'm likely to lose before Tom even has a chance to try," mused Mr. Swift as he hurried on toward his son's private workshop. "If his place is blown up, he may be blown up with it!"

A pall of smoke hung over that part of the works, and it was impossible to see what really had taken place. Men were running from other parts of the plant, and the fire alarm was clanging.

Tom and his father had mapped out a plan for their own private fire company, since the city engine house in Shopton was too far away to be depended on and the Swift plant covered a large space of ground. In this plant many machines, not all of Tom's invention or his father's, were turned out and scores of men were employed.

Many of these, realizing the danger as soon as they heard the explosion and listened to the clanging of the fire bell, realized what portended and rushed to their stations. Some hurried toward Tom's own particular part of the shop with chemical apparatus, others dragged lines of hose into which the water would soon be turned.

"I hope this is nothing serious," voiced Mr. Trace.

"Bless my spectacles, it looks bad enough!" fairly shouted Mr. Damon, pointing to the thick pall of black smoke. "The whole place is gone, I guess!"

However, it was not quite so serious as that, and a moment later, when a puff of wind blew aside the dark vapor, it was seen that Tom's small, private experimental building was standing intact. Smoke was pouring from several windows, however, and the shattered glass told its own story. But the smoke was lessening, and this seemed to indicate that the fire was not increasing.

As several of the workmen, bearing portable chemical extinguishers, hurried into the building, Mr. Damon pointed to a plot of grass beneath one of the windows that, Mr. Swift well knew, was the place where Tom had his desk.

"There's your boy, now!" said the odd character.

Mr. Swift caught his breath sharply, for he beheld the prostrate form of Tom stretched motionless on the sod.

"That's bad!" murmured Mr. Burch softly, and he had it in mind to tear up the wager agreement as soon as possible.

"Ho, Massa Tom!" yelled Eradicate in his high-pitched voice. "I save yo'!"

But Koku also had a desire to be of service to the master who had been so kind to him, and he likewise pressed forward.

There was a look of pain, grief, and anxiety on the face of Mr. Swift, and his friends were about to murmur some words of sympathy, for it looked as if Tom had been killed, when suddenly that young man stirred, put his hand to his head in a dazed fashion, and then sat up.

"Glory be!" shouted Eradicate. "He am alive!"

There was no doubt of it. Tom Swift was not only alive, but he did not seem to be hurt. There were black marks on his hands and face and his clothing was torn, also he was mud-stained where he had fallen into a soft spot on the turf. But he seemed not to be crippled or otherwise seriously injured.

His first glance, after he had looked toward his father and the advancing friends, was to his shop, and when he saw smoke pouring from

several windows he leaped up with a cry of alarm.

But a moment later Garret Jackson, the shop manager, who had been among the first to enter the building, came running out to call:

"Fire's out! Not much damage done!"

"Thank goodness for that!" murmured Mr. Burch.

"What happened, Tom?" asked Mr. Damon, with the freedom of an old friend. "Sounded as if the place went up."

"It pretty nearly did," answered the young inventor, looking at his smudged hands and then wiping his face, on one cheek of which appeared a small trickle of blood. "Have you got the fire under control?" he asked Mr. Jackson.

"Yes," was the answer. "Don't turn on the water!" he shouted as those in charge of a hose line were about to give a signal. "The chemicals are all we needed. The blaze didn't amount to much."

"I'm glad of that!" Tom was heard to say.

"Are you sure you're all right, my boy?" asked his father.

"Positive!" was the quick answer. "Sound in wind and limb!" and Tom jumped about and executed a few side steps to show that he had not suffered. "I was mixing some chemicals," he added, "when something went wrong and I

saw a smoulder of fire that I knew would turn into an explosion in a few seconds more. So I stood not on the order of my going, but jumped out of the window instead of running to the door."

"We were wondering why you were lying on that grass plot," said Mr. Damon.

"I landed there when I jumped," explained Tom. "And I wasn't sure but what some of my clothing had caught fire, so I rolled over and lay on my face to protect myself. I couldn't get up right away—sort of stunned I guess."

"What were you working on, Tom—that new triple traveler?" asked his father, giving the name temporarily assigned to the strange machine that Tom hoped would go on land, in the air and in the water.

"Well, not directly on that," said the young inventor as he walked toward his shop to ascertain the extent of the damage. "Yet it had to do with it. I was experimenting on a mixture to make gasoline more explosive. Not like ethel gas, though," he added, "for I want mine to be more powerful but not dangerous."

"Not dangerous!" exclaimed Mr. Damon. "Bless my accident policy, don't you call a fire, an explosion, and having to jump through a window dangerous enough, Tom Swift?"

"Yes. But I haven't got my new gasoline

mixture perfected yet," was the answer. "When I do there won't be any fires or explosions. Why did you think I might be working on the triple traveler, Dad?" he asked his father.

By this time the fire in the young inventor's private building was practically out and most of the smoke had blown away. Tom and his father and friends entered, and Tom pointed to the table where he had been working. Some shattered retorts and glass tubes testified as to the explosion's power. Tom had been slightly cut by flying glass, but that was the extent of his injuries.

"Well, I had the triple traveler in mind, Tom," said Mr. Swift, "because, just before you tried to blow yourself up, my friends and I were talking about round-the-world travel. And I guess I sort of made a foolish boast, Tom."

"What was that, Dad?"

"Why, I said, Tom, that you could circle the globe in twenty days actual time—nothing taken out for stops or anything like that. In twenty days flat, Tom."

"Well, I guess maybe it can be done when I get my new machine perfected," the young inventor said, calmly enough.

"It's got to be done, Tom, unless you want

me to lose twenty thousand dollars!" said his father.

"Twenty thousand dollars! What do you mean?"

"He wagered us ten thousand dollars apiece," said Mr. Burch, indicating his friend, "that you, Tom Swift, could circle the globe in twenty days. We say it can't be done!"

For a moment Tom Swift did not answer. His eyes roved to the wall of his office where a world map hung. Quickly Tom's eyes glanced along the fortieth parallel of latitude, the most logical course to follow on a race of this sort.

"It can be done," said Tom quietly. "You may take on those bets, Dad! I'll see that you win!" and there was a determined air about him. "I'll circle the world in twenty days!" promised Tom.

"Bless my alarm clock, that's the stuff!" cried Mr. Damon.

A moment later a girl's voice out in the plant yard was heard excitedly asking for Tom Swift.

CHAPTER III

INTO A NOSE DIVE

"WHAT happened? Is Tom hurt? Let me go to him at once!" the voice exclaimed.

A smile came over Tom's face.

"It's Mary Nestor," he murmured, and to the two visitors Mr. Damon explained in an aside:

"She and Tom are engaged."

"Lucky boy!" murmured Mr. Burch as he caught sight of a pretty girl hurrying into the rather upset office. For the place was upset in spite of the comparatively small damage caused by the explosion and fire.

"Oh, Tom! are you hurt?" Mary cried, hastening toward him, totally oblivious of all the others in the disordered room. "I heard a rumor that your whole plant had burned and I came over as fast as I could."

"Well, Mary," went on the young inventor, with a smile, "I'm glad to say that, for once, rumor got ahead of itself. Nothing very much

happened. Just a few chemicals went off unexpectedly."

"But you're cut!" Mary gasped, as she saw the blood on Tom's cheek. "Oh!"

"Just a scratch from a broken test tube," he explained.

Then Mr. Burch, with a fine sense of what was fitting, said:

"Mr. Trace, since we have concluded our business here and have made arrangements for separating our friend Bart from twenty thousand dollars, we might as well get out and——"

He did not say it, but the inference was obvious that he wanted to leave the two young people alone. Tom seemed to sense this for he said:

"Just a moment, please. I want to understand a little more about this wager."

"You'll understand it better when your dad has to take some of his big profits and hand over twenty thousand to us," chimed in Mr. Trace. It was true that the Swift Company had been very profitable of late, thanks to some of Tom's inventions.

"But still I don't like the idea of losing twenty thousand, or even ten," said Tom, with a smile. "And I don't intend to lose it, either, gentlemen!" he concluded.

"I'm glad you are backing me up, Tom,"

murmured his father. "How soon will the triple traveler be done?"

Tom looked at some plans on his desk, glanced at the world map and was about to answer when Mary broke in with:

"Is this a hold-up?" Her smile took any menace from the words.

"It's just a little bet among three old friends," said Mr. Burch, with a chuckle, "and our friend Tom is going to be the goat. I mean he is going to lose the race!" he concluded.

"Not much I'm not!" cried the young inventor, and when Mary looked a bit mystified Mr. Trace explained:

"We were discussing various means of travel, Miss Nestor, and the feat of Jules Verne's hero in girdling the earth in eighty days. That time has been brought down to about thirty, but Tom's father declared it could be done within twenty days."

"That suits me!" cried Tom. "If you give me time to complete the making of my new machine I'll prove my father to be right."

"Good boy!" murmured the aged inventor.

"Then you will have a part in this wager," suggested Mr. Trace.

"That suits me!" went on Tom. "Let me see—what can I do with my share of twenty thousand dollars?" he asked musingly, and with a

smile. But the smile faded when he looked at Mary's face and saw how distressed she was.

"Oh, Tom," she murmured, "think how near death you were just now in the explosion! And now you are going to risk your life again in one of your strange machines!"

She bit her lips to keep back her tears, it seemed, and the young inventor, seeing that she was on the verge of a nervous alarm, quickly said:

"Don't worry, Mary! There's no danger at all. Wait until you take a look at my new triple traveler. Come on out and I'll show it to you."

Tom did not invite any of the others into that part of the works whither he led Mary Nestor, and Mr. Damon and his friends had common sense enough not to intrude where, obviously, they were not wanted. Tom did not stop to wash his hands or face of the grime of the explosion, and he only wiped away the blood, which had now almost ceased to flow from the slight cut.

He led the girl into a large building, the doors of which were carefully locked, and when Mary's eyes had become accustomed to the gloom she saw a dim shape of something which seemed to have the elongated body of a boat, beneath which were sturdy wheels and above

which were stretched big wings like those on an aeroplane, with two rear propellers.

"This is really only a working model," Tom explained.

"A working model of what?" inquired Mary.

"Well, the triple traveler is all we call it at present," Tom answered. "As you see——"

"I can't see anything much!" interrupted Mary.

"Well you'll see later," went on Tom. "It's a secret yet and I have the windows shrouded. That's also why I keep the doors locked. No telling who of my enemies might try to sneak this new machine away from me. I've got to be careful. But when it's finished it will be one of the best things I have ever made."

"And are you really going to circle the earth in it, Tom?"

"I'm going to try. There's no question but what I can do it. But whether I can do it inside of twenty days is another question."

"You don't mean to say you are going to try to win that foolish bet?"

"I don't see how I can help myself," replied Tom. "It may have been a bit rash of dad to make it, but, now that he has, I must do all I can to help him win it. I owe it to my own reputation. It isn't so much a question of the money."

"Oh, dear!" sighed Mary.

"What's the matter?"

"I wish you weren't always chasing off on these wild trips, Tom!"

"I don't go very often. And they aren't as wild as the ones I used to take at first—like those to the bottom of the sea, for instance. I haven't been on any for a long while, either."

"No! Not since last fall when you inaugurated the Airline Express," said Mary, a bit sarcastically. "And look what a lot of danger you were in!"

"But I came out all right and I made a lot of money," said Tom, defending himself.

"And now you're going around the world. Oh, dear!" and Mary sighed dolefully.

Tom looked at her sharply. He saw that she was laboring under the reaction of fear after having heard the false report that his plant was blown up.

"Look here, Mary," he said, "I'm afraid you're losing your nerve! That will never do!"

"Losing my nerve?"

"Yes. I'll wager right now any flavor of ice-cream you care to name that you don't dare take an aeroplane ride with me!"

"I'll take you up!" cried Mary, and she smiled. "I'll show you!" and she tossed her head.

She often accompanied Tom on his trips in one of his smaller and less complicated aeroplanes, for Tom traveled this way on many occasions, to transact some business or to conduct experiments having to do with other machines.

"Then you'll take a sky trip with me, Mary?"

"I surely will. I think it will do me good!"

"I'm sure of it," said Tom, smiling.

They went out of the partially wrecked office, Tom giving orders to have it cleaned up and his gasoline experimental apparatus put aside for future use.

Tom next gave orders to have one of his speedy double planes run into the flying field while he went to the house to wash and get ready for the trip with Mary. Then he added his name to the signatures on the bet agreement, and said inside of six months from the present time he would start to circle the globe.

Mr. Swift, who had somewhat regretted his rash action, was all smiles now, for he had great faith in Tom.

"Of course twenty thousand dollars won't break us, Tom," he confided to his son as the latter was putting on his leather flying helmet and getting one ready for Mary, together with a leather jacket. "But, at the same time, I'd like to win it."

"Same here, Dad," echoed Tom. "And we will, too!"

In a short time the little plane, which would carry only two, was in readiness. The motor was tuned up and Tom and Mary took their places in the double cockpit, where the girl sat beside her sweetheart. It was a type of plane perfected by Tom.

"Where to, Mary?" asked Tom, as he looked over the controls.

"Oh, anywhere," she answered. "I want to get away from everything for a while."

"Then maybe you'd rather go up alone," suggested the young man.

"I said *everything*—not *everybody*," and Mary's accent made the meaning clear, at which Tom laughed.

He turned on more gas, there was a roar from the motor, the plane taxied across the field, and a few seconds later was soaring up toward the blue.

"I suppose you'll be traveling like this when you start on that—I can't help saying it—foolish trip around the world, Tom," said Mary.

"A lot faster," was his answer. "You see I've got to do twenty-five thousand miles in twenty days. That's twelve hundred miles a day. Counting twelve hours to a day on the average,

that's a hundred miles an hour. But of course there will have to be stops, forced or others, and so practically I'll have to double that rate and make it two hundred miles or more of flying every hour."

"Can you go that fast, Tom?"

"Faster, I hope. I just read of a navy seaplane that did two hundred and fifty-six miles an hour. I'm going to better that record if I can. Just wait until I get the new triple traveler finished."

"I hope it doesn't finish you, Tom," said Mary.

He leaned over toward her. By a new muffler attachment on the engine the roar of the exhaust was deadened and it was possible to talk without shouting. Love making can never be carried on in shouts, as you know well.

On and on flew Tom and Mary, the little plane gaining speed and height each minute. They were soon up above the clouds, flying fast.

"You're a good traveler, Mary," said Tom. "How'd you like to come along on the world-circling jaunt?"

"In some ways I'd like it—I could make sure you were safe," she said with a smile. "But I'm afraid I can't manage it," she added, as Tom gave her hand a squeeze. To do this he had to release one of the levers he was manip-

ulating, and when he again shifted it there was a peculiar sound.

"What's that?" cried the girl.

Tom Swift did not answer, but began frantically manipulating the controls. The plane was acting in a peculiar manner—even Mary with her inexperience realized that.

"Is anything wrong?" she asked.

"I'm afraid there is," Tom answered with a grim tightening of his jaws. "We seem to be going into a nose dive!"

Hardly had he spoken than the plane tilted forward and plunged toward the earth at frightful speed.

CHAPTER IV

JUST IN TIME

TOM SWIFT had been in dangerous situations before with aeroplanes and other machines of his invention. He had more than once been close to death, and he knew that the only way to get out of a tight corner was to keep his head. Now he did not so much fear for himself as for Mary.

"Is there any danger?" asked the girl, who had sense enough to sit quietly in her seat and not grab Tom's arms or interfere in any way.

"Yes, there is danger," the aviator answered quietly, as he kept at his task of trying to straighten out the plane. "If I can't bring her up we're likely to crash."

Beyond a gasp of her breath and a look of terror in her eyes, Mary showed no signs of the fear that was within her. Yet she was terribly frightened, for Tom as much as for herself.

"Come up here!" cried the young inventor, speaking to the plane as he might to a horse. He adjusted the levers, pulled back on the one

that tended to raise the forward edges of the plane to tilt her nose, and he tried to get the elevation rudder up. But in the end he had to admit that he was beaten.

"She won't come up!" he gasped.

"Then we'll have to crash!" murmured Mary.

Tom nodded hopelessly. He reached over and began loosening the buckle of the girl's safety belt before unfastening his own.

"The only thing to do is to jump when I give the word."

"Is there no chance of saving the plane, Tom?"

"I don't believe so, Mary. But I'm not worrying about the machine. I can make another. It's you!"

Tom put his arm around her and she leaned close to him. The machine was dashing downward now at terrific speed, and on a dangerous slant that meant the nose would strike the earth first, driving the engine back upon those in the cockpit. The motor had stopped, whether having been cut off by Tom or because of some defect Mary did not inquire.

"Leap clear when I tell you to," said Tom, as he made one more fruitless effort to straighten the plane out so he could pancake down instead of hitting on the nose. "You go out on that side, Mary, and I'll go on this."

"If there was only some water for us to land in," murmured the girl. "If we were only over Lake Carlopa instead of having to jump on the hard ground, it wouldn't be so bad, Tom!"

"I'm heading for Jamison's cranberry bog," the aviator answered, pointing to a marshy place just ahead. "It will be a softer place to jump on than the fields or in the woods. I hope we can make it!"

Nearer and nearer the earth the plane was descending. In a few seconds more it would be all over, and the machine would crash itself into a mass of tangled wreckage, while the bodies of Tom and Mary—it was terrible to think of.

"Shall I jump now?" the girl asked as she leaned over the edge of the cockpit and saw how perilously close the earth was.

"Just a moment," said Tom. "Wait!"

He made one last attempt to straighten the plane out, pulling on the lever with all his force. To his joy and surprise it yielded where before it had held firm. Back it came to the last notch and, with a suddenness that was like the quick stopping of a falling elevator, the plane flattened out on a level keel just as it started over the big cranberry bog, part of which was flooded with water.

"I leveled her out!" cried the young man.

"There's a chance now that we can make a three point landing and save ourselves."

The plane, however, had acquired terrific speed during her dive, and was going much faster than would have been the case had she been driving along under the power of the motor and on a level. In this latter case Tom could have eased the machine down gently.

As it was, they were going to strike the ground while going at terrific speed. Though in their favor was the fact that they could now hit the earth at a long slant instead of at an acute angle.

"Shall I jump?" asked Mary, who was closely watching her lover.

"No!" he cried. "Sit tight! Maybe we can do it!"

He was making some adjustments to the wings and tail rudder. The controls had jammed just when they were most needed, but they had now suddenly loosened up in as strange a manner as they had tightened, and this gave Tom Swift his chance.

He looked down, picking out the best possible spot for a landing, since he could now steer the plane somewhat. The spot he picked was where the water was deepest over the cranberry bog. The plane was not fitted with pontoons

for landing on water, and doubtless the under carriage was going to be greatly damaged in the fall. But, other things being equal, a fall into water in an aeroplane is less harmful to the occupants than a landing on the hard ground.

With steady hands and clear eyes that sought for the most advantageous spot, Tom guided the almost unruly craft. It was now within a few hundred feet of the earth, and a couple of seconds more would tell the tale.

Aside from the rushing of the wind past them, causing a roaring noise in spite of the helmets they wore over their ears, there was silence in the plane, for the motor was still dead. Amid the silence Tom heard some voices shouting below him.

He wondered dimly who could be calling, but guessed it was some autoists on the highway that bordered the cranberry bog.

"They're going to see something they didn't count on!" thought Tom grimly.

"Stand up, Mary, when I give the word!" said Tom to her as he leaned over the edge of the cockpit and looked down. His gaze took in a small automobile racing along the highway toward that part of the bog where he hoped to land.

"Stand up! What for?" asked the girl.
"Shall I have to jump after all?"

"No, but by standing, instead of sitting, the shock of landing will be less," Tom said. "Get ready now!"

His eyes were measuring the distance. In three seconds more, he calculated, the plane would crash into the bog of mud and water. But it would crash on a nearly level keel instead of on its nose, in which case nothing, in all likelihood, could have saved the occupants from death.

"Up!" cried Tom sharply, and he and Mary rose in their seats, clinging to each other.

An instant later the plane hit the ground with terrific force, but fortunately in the middle of a soft spot of mud and water which greatly reduced the shock. As it was, the jolt knocked Tom and Mary down, stunning them as they were crushed back into their seats, so that for a few seconds after the forced landing they did not realize what was happening.

Mary was the first to recover her senses. She struggled to a position where she could look over the side of the cockpit and at once cried:

"Tom! We're sinking! We're almost submerged!"

By this time the young inventor had aroused and, pulling himself to the edge of the cabin space, he glanced over.

"We're in a bad hole!" he exclaimed.

He learned later that the plane had gone down in what was virtually a quicksand in the cranberry bog—a place shunned by all who knew its dangers.

“What’s to be done, Tom?” cried Mary. “We got out of the nose dive just in time, but if we’re going to sink in this bog it will be just as bad, though not so quick!”

She saw, in fancy, a slow, terrible death by suffocation in the mud and water.

“Let’s jump out and try to wade to solid ground!” she went on.

“No! No! Don’t do that!” yelled Tom. “It would be sure death! The plane will hold us up for a time—perhaps until help comes.”

“Where will help come from?” asked Mary. “No one knows we are here, Tom.”

Before he could answer there came the sound of shouting voices and the tooting of an automobile horn from somewhere in the distance.

“Maybe that’s help now,” Tom said. “But they’ve got to hurry,” he added grimly. “We’re sinking fast!”

CHAPTER V

THE AIR MONARCH

RAPIDLY the small plane settled in the mud and water. It was down almost to the edge of the cockpit, and Tom was about to advise Mary to climb out and up on the upper surface of the wings, which he, likewise was going to do, when shouts over to the left attracted the attention of the two.

A couple of men—automobile mechanics to judge by their grease-soiled garments—stood on the edge of the bog, waving their hands.

“Hold fast!” the taller one urged. “We’ll get you in a minute!”

“You can’t come out here!” Tom shouted back. “It’s a regular quicksand. You’ll get in yourselves!”

“There’s some sort of a boat here,” said the other man. “We’re coming out in that!”

“A boat! Then they’ll save us!” gasped Mary.

“Maybe,” returned Tom grimly. He did not understand how a boat could be propelled

through that bog which was more like thick, slimy mud than it was water.

The two men disappeared behind a screen of bushes, and Mary cried:

"Oh, they are leaving us!"

But the reassuring shout came back:

"We'll be there with the boat in a minute!"

By this time the thick, muddy water (quicksand in solution it was) began seeping over the edge of the cockpit. Tom was helping Mary to climb up to a dry place, back on the fuselage of the machine, when out of the underbrush the two men emerged, pushing, by means of poles, a low, broad, flat-bottomed punt, which was so broad of beam that it did not sink in the swamp.

"We'll have you off in a minute!" called the shorter of the two men encouragingly.

By dint of hard pushing they worked the punt to the side of the stranded and bogged aeroplane, and Tom and Mary lost little time in getting into the safer, if less picturesque, craft.

"Will it float with all four of us in it?" Tom asked anxiously.

"I guess so," the tall stranger said. "But it will be slow work poling back to solid ground."

"Sorry we can't save your bus, mister," remarked the other.

"Don't worry about the plane," was Tom's answer. "There are more where that came from. And I may be able to save it at that."

"It would take a tank to yank that bus out," said the short man.

"What do you know about tanks?" asked Tom, as he took up a pole from the bottom of the punt and helped the two rescuers push the craft toward the solid point of land whence the welcome hails had come.

"I used to manicure one on the other side when we had the Big Fuss," was the answer, and Tom knew the man had been in one of the ponderous tank machines of the World War.

"I hate to leave that bus," sighed the tall man, with a look back at the now almost submerged plane. "She's pretty, but you had some trouble, didn't you?" he asked. "Sounded to me like your motor died on you."

"It did," admitted Tom. "And I couldn't straighten out."

"She was nose diving when my buddy and me saw you as we were riding along in our machine," went on the tall man.

"Nose diving is right," conceded Tom. "But I got her straightened out just in time."

"But not enough to zoom up," went on the other, and Tom was sure the man knew whereof he spoke.

"You've run a bus?" asked Tom.

"In France," was the sufficient answer.

By this time the punt had been poled through the mud, water, and quicksand of the cranberry bog far enough so that all danger was past. It was shoved against the point of land on which the two men had run out as they leaped from their auto, which they said they had left back on the highway.

"Well, I guess you'll be all right now," remarked the tall man as Tom and Mary got out of the punt.

"Yes, thanks to you," said the young inventor.

"If we can drop you anywhere in our flivver," went on the short man, "we'll do it."

"If you can take us to the Swift plant," said Tom, "it will be a great accommodation."

"We'll do that," said the short man, as his companion made the punt fast to a stump. "That Tom Swift is the big inventor, isn't he! Do you know him?"

"Slightly," was the answer, with a smile.

"This is Tom Swift!" exclaimed Mary, unable to resist the opportunity. She indicated Tom.

"You are?" gasped the short man.

"Gee!" exclaimed his tall companion.

"I happen to be," replied Tom. "And if you will leave us at my plant and come in so that I can thank you properly for what you did——"

"Aw, forget it!" snapped out the short man. "We don't want any thanks. You'd do the same, wouldn't you?"

"Of course," said Tom. "But——"

"Forget it!" said the other again.

"At least tell me who you are," begged Tom, as the two led the way to where they had left their small touring car.

"I'm Joe Hartman," said the tall man who had admitted he was an aviator in the World War.

"And when I hear anybody yell for Bill Brinkley then I come and get my chow!" added the short chap whimsically.

"This is my friend, Miss Mary Nestor," introduced Tom, and the girl held out a hand each to the two mechanics.

"All oil and grease!" apologized Brinkley, putting his hand behind his back. "We work in a garage at Waterford," he went on in explanation.

"And we'll gum you all up if we shake hands!" added Joe Hartman bashfully.

"As if I cared!" exclaimed Mary, and she insisted on grasping their oil-begrimed palms in a

warm pressure. "I want to thank you, too," she said as she told where she lived, begging the two to call and see her father and mother.

"If you fellows work in Waterford, maybe you know Mr. Wakefield Damon?" Tom added.

"Guess not," admitted the short man, while his companion shook his head in negation. "We haven't worked there very long," he went on. "Just now we had to deliver a repaired car in Shopton and we two went together. I drove this flivver," he added with a kick at one of the tires, "so I could bring Joe back."

"Well, it's a good thing you happened to be where you were," said Tom. "And I wish you'd come and see me some time," he added as the little auto was headed for his plant.

"Maybe we will," was all the two would promise when, a little later, they let Tom and Mary out at the office entrance and then drove on.

As the accident to the plane had happened several miles from Tom's plant, neither his father, Mr. Damon, nor the two wagering friends, Medwell Trace and Thornton Burch, were aware of it. Not until Tom and Mary came in, somewhat spattered by mud, and told of their experience was anything known of it.

Tom sent Mary home in an automobile and dispatched some of his workmen with a big

truck and long ropes to see if it was possible to get the little plane out of the swamp.

"And now," said Tom, as he finished washing off some of the grime, "I'm going to get seriously to work and help dad win that twenty thousand dollars."

Tom Swift had made a start on his new machine some time before. He had conceived the idea of a craft that was at once an automobile, a motor boat, and an aeroplane, and though his father had at first been doubtful and some of the mechanics who worked on it openly skeptical, Tom had persisted and now the craft was well on in the process of manufacture.

A model had been made, and though at first it would not work, Tom had kept improving it until it was perfect. The only thing that disappointed the young inventor was that it was not speedy enough, and he was looking for fast performances, not only in the air but on land and water.

"I've got to use a more powerful gasoline," he decided and he was experimenting on this fluid when the explosion came. Luckily, little damage was done and three days after the fire Tom's office had been repaired and he was hard at work again.

"What are you going to call it, Tom?" asked Ned Newton, the young former bank cashier

who was a close friend of the young inventor and, of late, treasurer and one of the managing officials of the Swift Company. Ned was in Tom's private workshop looking at the strange device.

"Well, I did think of calling it *Monarch*," was the answer. "The *Air Monarch* might not be such a bad name, if it does what I think it will do."

"When will you know?" Ned asked.

"In a few weeks. I'm going to rush work on it, now that dad has made his wagers. I've got to help him win that twenty thousand dollars."

"Do you think you can?" asked Ned.

"I'm going to!" declared Tom, with conviction. "Take a look at the *Air Monarch*, Ned, and see what you think of her as far as I've gone."

"Looks pretty good," admitted the young treasurer. "What's that for?" and he pointed to a small door in the rear of the machine, a door under the tail rudder.

"That's where the propeller is concealed," was Tom's answer. "Look and you'll see how it works!"

He pulled a lever, the door slid back, and in a tunnel-shaped compartment was a large, three-bladed, bronze propeller.

"That's for use when running on the water," the inventor explained.

"How does it run on land?" inquired Ned. "Like an automobile?"

"Not exactly," Tom said. "The same propeller that sends the craft through the air sends it along on the ground. Just as an aeroplane taxis across the field before mounting, you know. By keeping the tail rudder depressed I prevent the machine from rising, and it moves over the ground, though of course not as fast as in the air."

"There is no direct drive on these wheels then?" asked Ned, pointing to four strong wheels on which the machine rested and on which it would land after making a flight.

"Oh, yes, I can drive the car on the ground by gearing the motor directly to the wheels," said Tom. "But I can't get much speed that way, though I do get a lot of power. And in front here——"

But Tom suddenly stopped his explanations and looked toward the door of his private shop. The knob was turning in a stealthy manner.

CHAPTER VI

KICKED OUT

"WHAT's the matter?" asked Ned Newton, who was very much interested in Tom's new machine. Ned had gone on air trips with his chum before and, having heard of the wager and now seeing the *Air Monarch*, it is not at all unlikely that Ned had visions of another strange journey. "Anything wrong?" went on Ned, as Tom did not answer, but continued to stare at the door.

"There may be—I'm not sure," was the answer in a low voice. "Wait a minute."

Tom tiptoed softly to the door, opened it suddenly, and then uttered an exclamation of disappointment.

"What's the matter?" asked Ned again.

"He skipped," answered Tom.

"Who?"

"The fellow who was outside that door trying to overhear some of my secrets and find out about the *Air Monarch*," was Tom's answer.

"Spies?" exclaimed Ned.

"That's about it. Ever since I first started on this new idea and began work on the model and the craft itself, I've had a sneaking idea that I'm being spied upon. I am sure of it now. Somebody was listening at the keyhole, but they heard me coming and skipped."

"Who is it?" asked Ned.

"That's what I've got to find out. Keep quiet about this, and I'll set a trap." Then the two friends went to a far corner of the room, out of all possible range of the door, and talked for a long time.

The next few days were busy ones in the shop of Tom Swift. Now that his father, by his rashness, had committed his son to the attempt to circle the earth in twenty days, the older inventor was as enthusiastic over the matter as was Tom himself.

"I'll help you get the *Air Monarch* finished, Tom," said the old man, "and then you can start. I'm not going to have Burch and Trace crowing over me!"

"They won't crow, Dad," said Tom, with a smile. "I'll win that money for you!"

In order to hasten the completion of the *Air Monarch*, men who were in other shops controlled by Tom and his father were taken off their work and put to finishing the triple trav-

eler. All who were admitted into the shop where the big new machine was housed were sworn to secrecy.

The new machine was like a large aeroplane, but with an enclosed cabin something like the European air line *de luxe* expresses. Built like a Pullman car, only lighter, the cabin of the *Air Monarch* afforded sleeping berths for five. When not in use the bunks folded up against the wall, thus making an observation room. There was a combined dining room and kitchen where meals could be served.

The motor of the craft was abaft the living quarters, thus keeping the sleeping compartment free of gasoline fumes. The *Air Monarch* was of the pusher and not the tractor type of plane. Extending over the cabin, and out on either side was the big top plane. There was another plane below this, and from the lower one extended the long tail which carried the rudders, one for directing the craft up or down and the other to impart a lateral motion.

The body of the craft was something like a seaplane, staunchly built to enable it to travel the surface of the ocean if need be. And, as already explained, there were four sturdy wheels on which the *Air Monarch* could roll along the ground. These wheels could be geared directly to the motor, as are the wheels of an automo-

bile, or by using the air propeller the craft could be sent along as an aeroplane taxis across its starting field. The housed propeller for use in water has already been mentioned.

To such good advantage did Tom Swift set his men to work that four weeks after the laying of the wager the *Air Monarch* was completed except for the fitting up of her cabin and the taking aboard of supplies.

"The motor's the main thing, and that's completed and installed," said Tom to Ned one evening.

"Does it work?" asked the financial representative of the firm.

"It sure does!" was the enthusiastic answer. "Tried it on a brake test this afternoon and she did a little better than two thousand seven hundred R.P.M."

"Hope that doesn't mean 'Rest In Peace,'" chuckled Ned, who was not versed in mechanics.

"R.P.M. stands for revolutions per minute," Tom explained. "And when I tell you my new motor did more than twenty-seven hundred it's going some. That motor will rate better than six hundred and ninety horse power."

"Yes?" asked Ned, politely enough.

"Yes, you big boob!" cried Tom with good-natured raillery. "Why, don't you understand that the best performance a naval seaplane ever

did was only twenty-seven hundred R.P.M., and they couldn't get more than six hundred and eighty-five rated horse power out of their V-type motor? But at that they made two hundred and fifty-six miles an hour," said Tom with respect.

"Who did?" asked Ned.

"The United States naval flyers," Tom replied. "I'm ashamed of your ignorance," he chuckled. "Think of it—two hundred and fifty-six miles an hour! If I can equal that record, and I think I can, I'll win the twenty thousand dollars for dad with my hands down."

"Let's see," said Ned musingly, and he began doing some mental arithmetic. He was good at this. "The distance around the earth, say at the fortieth parallel of latitude, is, roughly, twenty-five thousand miles. At the rate of two hundred and fifty-six miles an hour, or say two hundred and fifty to make it round numbers, it would take about a hundred hours, Tom. A hundred hours is, roughly, four days, and you've got twenty! Why, say——"

"Look here, you enthusiastic Indian!" yelled Tom, playfully mauling his chum's hair. "You can't fly one of these high-powered machines for a hundred hours straight! They'd burn up. You have to stop now and then to cool off, take on gas and oil, make adjustments, and so on."

"I thought you were going to do continuous flying," objected Ned.

"I'm going to do it as continuously as possible," was Tom's reply. "But I'll need all of twenty days to circle the globe. There will be accidents. Storms may force us down, and you may want to stop and inquire into the financial system of the Malays."

"Me?" queried Ned. "Am I going?"

"You sure are!" was the answer. "You're going to be official score keeper. Dad needs that twenty thousand dollars. Yes, sir, you're going and it's about time we began to make serious preparations to start. You won't back out, will you?"

"No, I guess not," Ned said. "Who else is going? Mr. Damon?"

"Well, he wants to go," said Tom; "but he's afraid his wife won't let him. Dad is too old, of course. But I'll need three good mechanics, besides myself. With you that will make five—just enough to fill the cabin nicely. Come on out and take a look at the boat."

"Going to take along plenty to eat?" asked Ned, as he and his chum went across the now dark shop yard toward the brick building that housed the newest creation of the young inventor.

"Oh, sure!" was the response. "But we

won't have to stock up very heavily. You see we'll make several stops on the way."

"Just what are your plans?" Ned wanted to know.

"Well, I thought of starting from around here, or, possibly, from the vicinity of New York," Tom answered. "You see, there's a possibility of a race."

"A race to circle the earth?"

"Yes. The papers have got hold of this wager of dad's—I think Mr. Damon, in his enthusiasm, spilled the beans—and there is some talk of a national aero club taking the matter up. A paper or two has mentioned that such a trip will greatly advance the science of flying, and there may be a big prize offered for the winner of the race—the one who makes the best actual time around the world."

"Then you're likely to win considerable money," suggested Ned.

"If the plans are carried out, yes. But I'll be satisfied to win that twenty thousand dollars for dad. It will just about make me come out with an even break."

"An even break?"

"Yes. This machine will cost me around twenty thousand," said Tom. "Of course, I'll be out my expenses, but then dad got me into this thing unthinkingly and I'm going to see it

through. But if some one offers a prize and I can win it, I'll have that much velvet."

"It's a bigger thing than I thought," Ned stated. "I hope you won't be disappointed in your craft, Tom. I mean I hope it will work."

"It will work—I'm sure of that," said the young inventor. "Of course whether I can eat up the miles and actually get around the world in twenty days remains to be seen. But I'm going to try!"

The two were at the workshop now. It was shrouded in darkness, for the day's labor was over.

"Stand still a minute until I turn on the lights," Tom said, as he opened a little side door and stepped in, leaving Ned to follow. "It's as dark as a pocket in here."

Ned could hear Tom fumbling for the electric switch. Then, just as the light was turned on, there came, from the other side of the big shop and back of the *Air Monarch*, a clicking sound followed by a scream of pain.

"What's that?" cried Ned.

"I think it's my sneak trap!" answered Tom. "I hope I've caught him!"

In an instant the shop was flooded with light, and Ned followed Tom on the run around the big *Air Monarch*, which occupied most of the space. A moment later Ned saw Tom spring

upon a man who was caught by one leg in a curious wooden trap, the smooth jaws of which had clamped around the intruder's ankle.

"Help! Help!" screamed the man, for such he was—a burly, ugly, lowering chap dressed in the greasy clothes of a mechanic.

"You aren't hurt!" said Tom, pausing in front of the captive and eyeing him. "I set that trap there to catch any one who came in here unauthorized. It isn't meant to hurt—just to hold you fast. And I've got you, Cal Hussy! Got you good!"

"Let me out of here!" snarled the man, trying, without success, to free his foot.

"I will in a minute. But first I'll find out if you have taken anything," Tom said coolly. "Here, Ned, search him!" he called to his chum.

Then, while Tom deftly caught Hussy's hands in a loop of rope drawn tight, Ned went through the intruder's pockets. Aside from some personal effects, the search revealed nothing.

"You let me go!" snarled the man, with an evil scowl.

"I will if I make sure you haven't damaged my machine," went on Tom.

A quick inspection showed nothing wrong. The motor compartment of the *Air Monarch* was locked, and Tom knew the fellow had not been in it.

"Now I'll let you go," said the inventor to the fellow. "But I warn you the next time you step into my trap it will have teeth!"

Pulling on a lever, Tom opened the jaws of the trap and the man was free to step out. He limped slightly as he walked toward the window by which he had entered, for the spring of the trap was strong.

"Who is he?" asked Ned as the man started to crawl out. He had cut a pane of glass out of the window, sawed some of the iron protective bars, and gotten in that way. But in walking across the floor in the dark he had stepped into one of several traps Tom had set recently.

"That is Cal Hussy," explained Tom, watching every movement of the man. "He works for the Red Arrow Aeroplane Company, one of my rivals. Evidently they have heard something of my new invention and are trying to find out its secret. But I've fooled them. I caught Hussy the first crack out of the box."

"Yes, you caught me all right, Tom Swift!" snarled the man, turning when he was half way through the window. He scowled and shook his fist at the young inventor. "You caught me, but I'll catch you next time!"

This threat seemed to enrage Tom. He rushed at the fellow just as Hussy cried again:

"It will be my turn next time!"

Tom raised his foot and planted a well directed and richly deserved kick on Hussy where it would do the most good. Like a football dropping over the crossbar, the intruder went tumbling over the window sill, to fall heavily to the ground below.

He grunted, uttered some strong language, and then, as he ran off down the road in the darkness, he called back:

"You'll be sorry, some day, you did that, Tom Swift! You'll be sorry!"

"I'm sorry now that I didn't kick you twice!" cried the angry inventor.

CHAPTER VII

STRUCK DOWN

"WHAT's the idea, Tom?" asked Ned when his chum had returned to the middle of the big, barnlike room where he stood in front of the *Air Monarch*, contemplating the powerful machine. "What's the game?"

"A dirty game!" snapped out Tom Swift. "This Red Arrow gang has been trying to sneak around and discover some of my secrets for a long time. This is another attempt. Hussy has been here before. But I don't think he'll come again," added the young inventor grimly.

"Are they trying to do you out of this new contrivance?" asked Ned.

"I don't know that they are specifically after this," stated Tom. "They'll steal any new invention they can. But from the fact that Hussy was in here I judge they must have heard something about the *Air Monarch* and they want to get an idea of how she's made. I suspected they might try something like this, and so I set sev-

eral traps. Hussy happened to step into one," and taking Ned to the various windows Tom showed other devices to nab intruders.

Going over the machine and making an examination of the workshop in company with Ned, convinced Tom that Hussy had been caught before he could do any damage.

"But from now on I'll have to be doubly careful," Tom declared. "And if I see Hussy around here again——" he did not finish, but it could easily be guessed what would happen.

From then on it became increasingly difficult for strangers to get near the Swift plant. Eradicate and Koku were kept on guard in the shop where the *Air Monarch* was housed and Mr. Swift, with a smile, said they at times even looked on him with suspicion.

But the days passed and the big machine was practically completed, and then came a trial flight which was successful. The giant craft took the air like a bird, and though its speed was not quite up to Tom's expectations, he said that with some adjustments he thought it would beat any aircraft he had ever made.

On land the progress was necessarily slower, and in the water it was slower still. But even at that the *Air Monarch* did well, and it could do still better, Tom declared.

The machine was taken back to the shop for

some final adjustments, and Tom was busy superintending these one day when Ned Newton burst into the building, waving a paper over his head and exclaiming:

"Look at this, Tom! Listen to this! You've got a chance to make a fortune!"

"I sure need it," said the young inventor, with a smile. "This machine is costing a lot more than we'd figured on. But what's the idea? Has some one left me a million?"

"No," answered Ned. "But this paper, the *New York Illustrated Star*, offers a prize of one hundred thousand dollars for an international race around the world in the shortest time—actual time. Why, Tom, those are exactly the conditions under which your father wagered with Burch and Trace! Why don't you go in for this?"

"Maybe I will," said Tom. "Let's have a look!"

Eagerly he read the story in the paper, setting forth the terms of the prize offer. They were simple enough.

At a date about a month off, any person who wished to contest must start from an aero field on Long Island. The first person to return to the starting point, after actually circling the globe, would be given a hundred thousand dollars.

There were no conditions except that all contestants must prove by documentary evidence, such as having signed statements from officials in various countries, that they had passed through or over them on certain dates. The world must be girdled on a circle of one of its great circumferences, that is the equator, or a parallel not too far above or below it. Or, if a contestant desired, he could circle around a longitudinal line. But as this would mean flying over the north and south poles, that was practically out of the question. It was assumed that those who took part would travel along about the fortieth parallel, as this would keep them over fairly civilized countries for the longest period.

Contestants could travel as they liked, in any sort of conveyance, motor car, steamer, train, airship, or submarine. They could change conveyances as often as they pleased. The sole requisite was that they must come back to the starting point, after traveling completely around the earth, and they must prove that they had done it.

"This suits me!" exclaimed Tom, as he read the conditions.

"Then you'll enter for the hundred thousand dollars?" asked Ned.

"I certainly will, and I hope to win it. Now

this race is going to be worth while. If I won the twenty thousand dollars for dad, I'd hardly break even. But if I win the prize—oh, boy!" and Tom patted the big machine into which his hopes were built.

Keyed up to a high pitch by the prospect, Tom hurried his mechanics and helpers to the limit. Not any too much time was left to enter the *Illustrated Star's* contest, and within a few days Tom Swift's entry had been formally sent in and acknowledged.

Each succeeding day's issue of the paper gave Tom and Ned news of the event, and one day Tom pointed to an item in the general story.

"The Red Arrow people are going to try for the prize," he said. "They're going to fight me. That's why Hussy was sneaking in here, I guess. They wanted to see if they could add anything to the aeroplane they are going to enter."

"Are they going to try in an aeroplane?" asked Ned.

"So it says here. It doesn't mention any boat or automobile auxiliary."

Tom had been obliged to described the method he proposed to follow in the world race, and of course it was publicly known now that he would try in a combined automobile, motor boat, and aeroplane. Aside from some hydroplanes, which

of course can skim along on the surface of the water, as well as soar over land, Tom's was the only machine of more than a single ability.

Many of the contestants, of which there seemed likely to be plenty, at least at the start, were going to make the attempt by special steamers or trains, for not a few wealthy globe-trotters entered the contest for the big purse.

It lacked about a week of the time of the start of the international race when one morning Tom Swift received a telegram. It was signed by a name he did not at first recognize, that of Armenius Peltok, and read:

"If you are going to enter international world race I shall be honored if you will take me with you. I speak all civilized languages and some uncivilized, and am also an aircraft mechanic. Reference the National Aero club."

"Another crank," murmured Ned.

"I don't know about that," voiced Tom. "It's worth looking up. See if you can get the Aero Club on the wire."

When Ned had done so and had been told that Peltok, though little known in America, had a great reputation in Europe and was thoroughly reliable, a message was sent asking him to call at the Swift plant. Peltok had wired

from New York. A day later he telephoned that he would be with Tom very shortly.

"We need another good man," Tom said to Ned.

"How many are going?"

"Five."

"Well, who are the other two besides you, Peltok, and me?"

"I haven't decided yet, but I have my eye on a couple of young fellows. Now let's see what we have next to do."

"There's plenty," stated Ned, with truth.

The work went along. The *Air Monarch* was fully equipped for the race, and another trial flight showed big improvement as regarded her three speeds, on land, water, and in the air. Night and day men were on guard now, to keep Tom's secret of his craft. Though in general its character was known, there were many things about it that the inventor did not want to reveal.

Meanwhile, the plan of an international world race was meeting with favor on all sides. Though one paper had offered the prize, the other journals gave plenty of space to the event and excitement was at a high pitch. Some wild and rash schemes were talked of, and not a few new and queer machines, both for land, air and water travel were entered. One man pro-

posed to go in a motor car, hiring speedy, small steamers when land failed him, to transport his machine.

Peltok arrived and created a favorable impression on Tom and Ned. He was a quiet, reserved man, of great muscular strength, and he knew travel machines from end to end.

"And he can speak anything!" declared Ned. "He even talked to Koku in the giant's own language."

"No!" cried Tom.

"Fact! You ask Koku."

Tom confirmed Ned's statement. Peltok was a great linguist, and it was felt this accomplishment would be valuable should the *Air Monarch* have to land in uncivilized countries.

A few days before the *Air Monarch* was to leave for Long Island, Ned came to Tom with rather a serious face.

"We need more money, Tom, to complete the stocking of the ship and arranging for carrying on the business here while you are gone," said the financial manager.

"Get it from the bank," said Tom.

"We can't. We've stretched our credit to the limit. We need ten thousand dollars in cash."

For a moment Tom did not know what to do. Then he remembered his millionaire friend

Jason Jacks, who had helped him on the Airline Express in a like emergency.

"Call Jacks," Tom decided. When Ned did this, explaining Tom's predicament, that eccentric, but kindly, character at once arranged the matter, sending, not ten, but fifteen thousand dollars to the credit of the Swift Company in the bank.

"And if you want more you can have it," added Mr. Jacks. But Ned said that would do.

"Well, I go to New York to-morrow," said Tom to Ned one evening, "to sign the final papers in the race contest. All contestants are to be present in the *Illustrated Star* office."

"Where are you going now?" asked Ned, for his chum had on his hat and the electric run-about was at the door.

"Over to see Mary," was the answer.

A little later Tom Swift was on his way. But for some reason or other, when he was within a quarter of a mile of the girl's house, the electric machine suddenly went dead and stopped.

"That's queer!" mused Tom, as he got out of the stalled car to have a look. "I thought the batteries were fully charged. Some one must have been running it without telling me. Well, I can walk, I suppose. It isn't far."

He tested the storage batteries, found that his surmise was correct—that they had ex-

hausted themselves, though unaccountably—and then he started to walk.

But he had not gone far along the road, which was very lonely at this point, when a dark figure sprang suddenly from the bushes, leaped toward the young inventor, and uttered a smothered imprecation. There was a dull, thudding blow, and Tom was stricken down, sinking unconscious in the long grass at the side of the highway. Then the dark figure, with a sinister chuckle, fled amid the shadows of the night.

CHAPTER VIII

MIDNIGHT PROWLERS

"WELL, Mary," remarked Mr. Nestor as he looked at the clock. "Tom is a bit late, isn't he?"

"Oh, he'll be here," said the girl, with a smile. "He said he was coming to take me for a little ride in the electric runabout before he has to go to New York to-morrow to sign up in the world race. Tom will be here."

"Yes, I never knew him to fail an engagement," went on Mr. Nestor with another look at the clock. "Yet he's a bit late. I'm going out and smoke a cigar. If I see him coming——"

"Now, Daddy!" laughed Mary, "you don't need to tell Tom to hurry. He isn't a child. What if he is late?"

"Oh, well, nothing. But I just thought I'd mention it," and with that Mr. Nestor went out.

Though Mary would not admit to her father that Tom was later than usual, she was more

honest with herself. And when nine o'clock came and Tom had not appeared, she became uneasy.

"If anything in the way of business had detained him he would have telephoned," said the girl. "I wonder if anything could have happened? Highfield Lane is lonesome after dark, and he would come that way."

She waited a bit longer, growing more nervous all the while, and then she came to a decision.

"I'm going to walk along toward the Lane and see if he's coming," she said.

Mary expected to see her father out in front, also peering down through the darkness for the approach of Tom's headlights, for the young inventor and Mr. Nestor were firm friends. But the glow of two cigars on a side porch and the murmur of voices there told Mary that her father had met Mr. Goodrich, from next door, and the two were visiting.

"Where are you going, Mary?" her father called to her as he heard her go out the front gate.

"To look for Tom. He'll be along pretty soon."

Though the girl peered sharply all along the quarter of a mile that lay between her house and Highfield Lane, she did not see her lover. Then she turned into the lane proper and

caught sight of the glowing lights of a car she knew, because of their peculiar position, to be on the runabout.

"Here he comes now!" Mary exclaimed. A moment later she was aware that the lights were not moving. The car was standing still. "He must have had a break down," thought Mary. She knew, from often having ridden in it, that the car lights were hooked up to a separate battery from the powerful ones that operated the motor.

When the girl, wondering what had happened, hurried toward the machine, she stumbled over Tom's body, prone on the ground. She recognized him by the light from the car lamps.

"Oh, Tom! what has happened?" she cried.

There was no answer, and when Mary put her hands to his head she felt a dampness that told of blood. But she was a girl of grit and spunk, and, exerting all her strength, she managed to half drag, half lift Tom into the machine. Mary knew how to operate the runabout, but when she turned on the current there was no response and she realized that the batteries were useless.

She hardly knew what to do, but was about to shout and summon help. Should this fail to bring assistance, she planned to hurry to the nearest house. But just as she was about to call she became aware of an approaching car.

For a moment she feared that it was Tom's assailant returning to finish the cruel work, for that Tom had been attacked Mary at once guessed. But the car proved to contain a man whom Mary knew, and when he had stopped in response to her frantic hail he helped her lift the unconscious form into his car and took Tom to the Nestor home.

"Nothing but a nasty crack on the skull," said Dr. Blake, who was hastily summoned, and he soon restored Tom to consciousness, after which the young inventor looked around him curiously and murmured a question as to what had happened and how he got where he was.

Mary told of having stumbled over his unconscious body, and then Tom remembered.

"It's a plot!" he exclaimed. "They want to get me out of the world race!"

"Who would do such a thing, Tom?" asked Mr. Nestor.

"There are several who would have an object in keeping the *Air Monarch* out of the contest. The Red Arrow people for one."

Tom did not mention the name of Hussy, but it was this scoundrel whom he had in mind as the author of his misfortune. He had not seen, and had only faintly heard the noise of the man emerging from the bushes, for Tom had been struck down very suddenly. But he strongly

suspected the man who had been caught in the wooden trap.

Tom's strong constitution and his robust health enabled him to recover quickly from the blow, which had been a glancing one, and by midnight he was able to proceed back home. Mary insisted that she and her father accompany him in a taxi, and Tom was glad of the company.

Before he went to bed he sent Koku and a mechanic back to tow in the stalled runabout, and the next day, though suffering from a severe headache, the inventor examined the motors and batteries of his machine, finding that both had been tampered with.

"Hussy, or whoever it was, left just enough juice for me to get to the lane," reasoned Tom. "He knew I'd stall there and he was waiting for me. But this means I am still being spied upon. I've got to take more precautions."

As Tom was expected in New York that day to sign final papers in the contest, he left Ned in charge of the works, with Eradicate and Koku to help guard them.

"Dey ain't nobody gwine to git in even to smell dat *Air Monarch* while I's heah!" declared the colored man.

"Me—I sit on um when um come in!" stated Koku, in his own peculiar way.

In due time Tom was in the *Illustrated Star* office. There he met a number of the other contestants. The young inventor knew some of them as men who had made reputations piloting fast automobiles, aeroplanes, or speed boats.

"Well, Kimball, what's your game?" asked Tom of a man with whom he had several times raced at county fares in autos.

"Tom, I've got 'em all beat, including you!" declared Jed Kimball, with a good-natured smile. "I've got an air hydroplane that's a wonder. If I don't circle the globe in fifteen days I won't take a cent of the hundred thousand dollars."

"Yes, you won't!" Tom chuckled.

He turned to Bob Denman, a rich and sporty young fellow who had been in several balloon and aeroplane accidents. He loved sport for the sport of it.

"Well, Bob," asked Tom, as he shook hands with him, "are you going in for it?"

"I sure am."

"Balloon or skyplane?"

"Neither, Tom. I'm going by special trains and steamers. I'll be back on the starting field waiting for the rest of you fellows to come and have lunch with me after I win that hundred thousand. You can boast all you like about

fast motors, speed boats, and aeroplanes, but I'm going to go by regular lanes of travel. I've chartered five steamers and ten special trains to take me around the world. There won't be a minute of delay, and I'll finish as fresh as a daisy."

"If you finish at all!" laughed Tom. "Who's that?" he asked, pointing to an eccentric man who was nervously pacing the office while waiting for the newspaper officials to get the papers ready for final signing.

"Some Professor Modby," was the millionaire sport's answer. "He's going in a new dirigible that uses a gas he claims he can make out of burning weeds, rotten potatoes or apples and, on a pinch, from green grass."

"He must be crazy," murmured Tom.

"Well, he's got a queer looking machine," stated Bob. "He showed me some photographs of it. Looks like a combination of one of your Airline Expresses and the *Los Angeles*."

"Guess I haven't much to fear from him," thought Tom, for he knew how the big dirigibles suffer in stormy weather.

In a room opening out of the main one where the various contestants were gathered a self-important sounding voice was saying:

"Yes, I agreed to all your terms, and I want to add one of my own. That part of the prize

money be devoted to charity. The concern I represent doesn't need the cash. It is only going in to encourage others. So I would stipulate that part of the prize, which we expect to win, must go to charity."

"If you win the hundred thousand, Mr. Kilborn," stated Mr. Elliot, the managing editor of the *Illustrated Star*, "you may give it all to charity if you wish. But we cannot now, at this late hour, stipulate that. The prize will be paid in cash to the winner, and he may do as he pleases with it. Now if you will come out with the others we will sign the final papers."

"Kilborn!" muttered Tom to Bob Denman. "Is that Dan Kilborn of the Red Arrow concern?"

"That's the bird," assented Bob. "He's been fussing around here all morning, telling what a wonderful new hydroplane he has. Named after the company—*Red Arrow*. He says he's going to burn up distance with it."

"Let him try," returned Tom, and then he caught a nod from the boastful Kilborn, whom he knew slightly.

"I'd like to ask him how much his tool Hussy told after his midnight visit to my shop," thought Tom. But he did not want to start any unpleasant altercations in the newspaper office.

Dan Kilborn was an ace of the World War and had done well in France and had proved himself a brave man. After the end of the conflict he had gone into air racing, and since affiliating himself with the Red Arrow concern there were ugly stories going around that he was not fair to other contestants in sky races. Several other pilots had more or less openly accused Kilborn of banking so close to them as to endanger their planes. But Kilborn only laughed this off.

"If he tries any trick with me," muttered Tom, "I'll show him where he can get off, and I won't provide a parachute, either!"

The terms of the contest were explained by Mr. Elliot, all present agreed to them and the final signatures were affixed. The start was to be made that day a week, from a large field in Long Island, whence all must start at once. From that field the air machines would take off, and those who were to cover the first leg of their journey in water craft must leave the field in autos which would convey them to the docks where their boats or hydroplanes were moored.

"Time will be counted as soon as the cannon is fired on the starting field," said Mr. Elliot. "Contestants can travel in any way they choose, and the one back on the field in the shortest actual time, with proof that he has really cir-

cled the globe, will win. Now then, gentlemen, I wish you all the best of luck."

Tom hurried back to Shopton. There were still some things to do on and about his craft, but a few days later all would be in readiness for the start. In order to get a chance to tune his craft up a day or so in advance of the actual start from Long Island, Tom planned to fly there and wait until the signal cannon was fired.

"But who are going to be the others of your crew?" asked Ned the day before the start for Long Island. "You said there would be five, but you, Peltok and I are only three. Is Mr. Damon going?"

"Bless my parachute, I wish I was!" exclaimed the eccentric man. "I'm going to put a big bet down on you, Tom, but I can't go with you."

"Why not?" asked Ned.

"My wife won't let me. She says it's too dangerous for an old man. Good night! I'm not old!" asserted Mr. Damon. He certainly was not, in spirit at least.

"I've got two young fellows who will form the others of the crew," Tom said as Mary Nestor came to where he and Ned were standing. For there was to be a christening ceremony and Mary was to break a bottle of ginger ale on the

sharp nose of the *Air Monarch*. "There they are now," he added, as two figures approached.

"Why, Tom!" exclaimed Mary as she saw them, "those look like the two men who rescued you and me when the plane almost took a nose dive into the cranberry bog."

"They not only *look* like them but they *are* those lads," chuckled Tom as he introduced Joe Hartman and Bill Brinkley to Ned.

They nodded and smiled at Mary. After the rescue Tom had made some inquiries about these automobile mechanics and, learning that Hartman had been an efficient flying man in France while Brinkley had managed one of the big tanks, Tom concluded they were just the men he wanted.

Accordingly, he had engaged them, much to their delight, and they were now ready to set off on the trip around the world. They went into raptures over the mechanical perfection of Tom's latest machine.

"Well, Mary, I guess it's up to you," said Tom a little later when the invited guests had all assembled. "Do your stuff!"

"What do you mean, Tom?"

"I mean christen my bus."

"Are you going to make a speech?"

"I am not!" was his hasty reply. "I've got

enough else to do to get ready for the take-off to-morrow morning. Come on now, my dear, make it snappy!"

Mary made it snappy by cracking the bottle of ginger ale on the prow of the shining craft and murmuring:

"I christen you *Air Monarch*!"

"And long may she sail!" cried Ned.

After this the workmen and guests gave three cheers and the informal ceremony was over.

"Bless my fountain pen," murmured Mr. Damon, a bit sadly as he looked at the beautiful machine, "I wish I was going!"

Tom, with the help of Ned, Peltok, and the two mechanics, spent the remainder of the day putting the finishing touches on the *Air Monarch*. Stores were taken aboard, together with a supply of a new form of gasoline Tom had perfected in spite of having been nearly blown up by it. There was not enough of this for the entire trip, and it was impossible to provide any at various stopping places or stations around the world. So what had been made was to be reserved for special occasions where great power or speed was needed.

"Well, I guess everything is ready for the hop-off to-morrow morning," said Tom to Ned that night as they made a last inspection of the *Air Monarch* in her hangar, which stood in a

field not far from Tom's house. "I hope everything will be all right."

"It won't be your fault if it isn't," stated Ned. "But if any little thing wrong develops you'll have time to tinker with it on the Long Island field, won't you?"

"Oh, yes! But I don't like these last minute repairs. I'm hoping I sha'n't have to make any."

"Same here," murmured Ned.

Tom and Ned were sleeping in adjoining rooms, and it must have been some time after midnight that they were awakened by hearing a commotion in the hangar where the *Air Monarch* was kept. Several shots were fired, and Koku's booming voice could be heard saying:

"Master! Master! Come! Bad man try to break in!"

"They're after my machine!" yelled Tom, leaping from his bed and taking an automatic pistol that lay ready to his hand. Ned, too, leaped after his friend to do battle with the midnight prowlers.

CHAPTER IX

THEY'RE OFF!

OUT into the night rushed Tom Swift and Ned Newton. They quickly shook the sleep from them and were ready to fight. A noise and commotion in the vicinity of the hangar where the *Air Monarch* rested drew them in that direction. Several figures were seen rushing about in the gloom, and Ned easily made out the form of the giant.

"What's the row, Koku?" yelled Tom.

"Bad mans!" was all the giant could say, and then Tom and his chum saw him start to run after a man who was trying to get away.

"Burglars, dat's what dey is!" shouted Eradicate. "Tryin' to steal yo' new machine, Massa Tom!"

"They'll have some job if they try to steal the *Air Monarch*!" the young inventor exclaimed. "I've got the motor doubly locked. But they may damage her."

"Who?" asked Ned, as he ran on beside his chum.

"That bunch from the Red Arrow concern, I suspect," was Tom's answer. "There goes one!" he cried as a second figure, besides the one Koku was after, started away.

Tom sped after this fellow with Ned closely following. As the two ran on there came a sliver of flame in the darkness, followed by the report of a shot, and Koku yelled.

"They've winged the giant!" shouted Ned.

"It will take more than one bullet to stop him!" panted Tom.

Another shot was fired, and then came a yell of fear and terror. But it was not the voice of the giant. It was the cry of an ordinary man, and Ned guessed what had happened and yelled:

"Koku got his man!"

This was proved a moment later as the giant shouted:

"Me got 'im! Me got 'im!"

Tom, however, was too busy chasing after his quarry to pay much attention to his big guard who, he expected, could look after himself.

The fellow Tom was chasing was running fast, but he was no match for the young inventor whose anger lent him added speed, and just as the retreating form reached the outer gate of the big fence which surrounded the hangar, Tom made a flying football tackle and downed his man.

"Let me go! Let me go!" the intruder pleaded.

"Not much I won't!" panted Tom, as he got a firm hold on his man. "And I think I know who you are, too! Here, Ned! Bring that flashlight!" the inventor shouted.

A moment later the financial manager had joined his chum, aiding him in subduing the rascal. Then, when the fellow, thoroughly cowed, was taken in charge by several workmen who had been aroused by the alarm, the light was focused on his face.

"I thought so!" exclaimed Tom, as he scanned the features. "Hussy! You got trapped again, but in a different way!" chuckled Tom.

"If you know what's good for you, let me go!" snarled the man, endeavoring to break away. But he was too firmly held for that.

"I'll let you go after I start on my world trip, and not before!" declared Tom. "Hold him," he directed to his men. "And we'll see who Koku got!"

The giant and Eradicate could be heard approaching, the big man muttering again and again:

"Me got 'im! Me got 'im!"

While Eradicate, not to be left out, added:

"I help cotch him, too! I tripped him up wif mah foot!"

"Good work, Rad! And you, also, Koku!" cried Tom. "Bring him here!"

The second prisoner was placed alongside of Hussy, the latter scowling over his fate. Tom looked at the fellow Koku and Eradicate had caught, but found him a stranger.

"Though I don't doubt," said Tom to Ned, "that he's one of the Red Arrow gang. Well, two in one night isn't so bad. Lock 'em up, men," he said to his employees, several more of whom came running up, for a general alarm had sounded throughout the works. Many of the mechanics lived close to the shops.

"Lock us up!" burst out Hussy. "You don't dare do that!"

"Don't I?" cried Tom angrily. "You'll soon see! Why shouldn't I dare, you trespassing, thieving rascal?"

Hussy and his companion, the latter saying nothing, were hustled off to one of the shops and locked in a steel enameling oven, where various parts of machinery were baked to give them a high polish. There was no fire under the oven when the prisoners were put in, of course, and the steel cage made a most effective jail.

"In the morning you'll be locked in regular cells," Tom said.

"You don't dare hold us!" stormed Hussy.

"You've got another guess coming," Tom chuckled. Then, when a guard had been posted near the prisoners, the young inventor asked Koku and Eradicate what had happened.

It developed that the two who were on guard had heard a disturbance shortly after midnight, and, investigating, had seen Hussy and his companion sneaking into the hangar. At once the colored man and the giant gave the alarm and rushed to capture the intruders, the end of the affair coming about when Tom and Ned joined the party.

"What was their game?" asked Ned, when he and Tom had made sure the *Air Monarch* had not been tampered with.

"Well, they couldn't hope to steal any of my patent ideas in time to add them to their machine," decided Tom. "There isn't opportunity for that, with the start of the race almost here. I think they were trying to disable my machine so I couldn't start. Kilborn and his bunch know I'm the most dangerous rival in this globe-circling race, and with me out of the way they stand a good chance to win. They wanted to cripple the *Air Monarch*, I'm sure."

"But they didn't!" echoed Ned.

"No, they didn't," echoed Tom, "thanks to Rad and Koku."

Additional guards were placed about the

hangar for the remainder of the night, but there was no further disturbance and early in the morning Tom had the two prisoners, in spite of their strenuous objections, taken to the Shopton jail where they were held in default of heavy bail on a charge of breaking and entering with intent to steal. They had broken a lock on the big gate to get in, but had been detected in time.

"You'd better withdraw this charge against me, Swift!" stormed Hussy when he was being arraigned before being taken off to jail.

"Withdraw nothing!" snapped the young inventor. "You're going to stay locked up a long time! Kilborn will have to get along without you and your pal!"

A dangerous look came into the eyes of the trapped man. He shook his fist at Tom when being led back to a cell and muttered:

"You'll be sorry for this, Tom Swift!"

But Tom was not worried and hastened back to his hangar to make ready for the flight to Long Island whence the world race would start the following day.

There was little ceremony attendant upon the departure of Tom and his friends from Shopton, since Mr. Swift, Mary, and Mr. Damon had arranged to see them off in Long Island. When the *Air Monarch* had been gone over fin-

ally by Tom and his mechanics, the craft was wheeled out of the hangar, the five who were to make the trip got into the cabin, and Tom, at the motor controls and steering levers, called:

"All clear?"

"All clear!" answered Mr. Jackson.

"Let's go, then!" exclaimed the young inventor, and with a wave of his hand to his father, Mary, Mr. Damon, and the crowd of workmen, Tom pulled the starting lever.

The big propellers began whizzing, the machine moved across the smooth aero field with ever increasing speed, and a moment later took the air with the ease and lightness of a regular aeroplane and not like the heavy craft she was.

"Starts well!" observed Ned in the cabin beside his chum.

"Like a sewing machine!" said Tom.

Up and up he pointed the nose of his craft and they were soon headed for Long Island.

"Never have I ridden in a better craft," declared Peltok who, with Brinkley and Hartman, was in charge of the machinery. "She is perfect!"

"That remains to be seen," said Tom, though he was much pleased. "We haven't really started yet."

No attempt was made to get speed out of the craft on what was, practically, but another trial

flight. But Tom knew he had plenty of power in reserve. The *Air Monarch* had been tried in the air, on land, and in water and had performed perfectly.

Under the skilled hands of the three mechanics the machine behaved well and in a comparatively short time she settled gracefully down on the field in Long Island and took her appointed place. Many other machines were already there, and others were constantly arriving. The field was a busy place. All contestants had to start from there, though those going in motor boats, or by trains and steamers would, as has been said, leave in autos which would take them to the beginning of the first leg of their journey. But time would start to be counted when the cannon boomed on the field.

There were two or three free balloons and several small dirigibles, including the one operated by Professor Modby and his crew. The *Red Arrow* hydroplane was floating in Long Island Sound, not far away, and Kilborn planned to reach his craft in a speedy auto. He was walking about his car when Tom got out of the *Air Monarch*.

"So, that's what you hope to win with, is it?" sneered Kilborn.

"That's the little old bus!" said Tom, with a

grin. "And I'm afraid you aren't going to have all the company you counted on to be with you during your trip."

"Company? What do you mean?"

"I mean that Hussy and the man you sent with him to tamper with my machine are arrested and locked up in the Shopton jail," said Tom.

"Hussy arrested?" gasped Kilborn. "I told him—I mean I didn't send him to do anything to your craft!" he cried quickly.

"Didn't you?" asked Tom, with a smile. "Well, he didn't get a chance to do anything, though he tried. But if you're looking for Hussy—call up the jail!"

Kilborn muttered something under his breath and turned away.

"I guess that will hold him for a while," chuckled Ned.

From then on Tom and his crew were kept busy. There were many last-minute things to be done and final adjustments to be made to the motors, as well as food supplies to put on board. So it was not until night that Tom and Ned found time to rest.

All the other contestants were equally busy, and many police were required to keep back the curious crowds. The start was to be made in the morning, and Tom and Ned arranged with

some workmen from the shops to guard the *Air Monarch* zealously during the hours of darkness.

In spite of fears that something might happen, nothing did, and when morning dawned clear and bright it was seen that the day of the start was perfect. Tom and his crew were up early, making final changes and adjustments, as all the other contestants were doing.

Final instructions were given, and the rules gone over again to make sure all understood. Mr. Damon, Tom's father, Mary and her father and other friends arrived by auto to see the *Air Monarch* take off. All the other contestants had scores of friends also, so the field was a mass of humanity.

"There goes the warning gun!" cried Ned as a shot boomed out. "Are you all ready, Tom?"

"All ready!" was the answer.

"Stand clear!" came the order from Peltok.

"Good-bye, Mary! Good-bye!" called Tom to his sweetheart.

"Good-bye!" she echoed. "I know you're going to win!"

"Thanks! I hope I shall!"

"Tom, remember, I've got my money on you!" said Mr. Swift, with a smile.

"I'll not forget, Dad!"

"Bless my Liberty Bonds, I've got a bet on

you myself, Tom!" exclaimed Mr. Damon. "Oh, dear!" he sighed, as he saw the final preparations for the start, "if it wasn't for my wife I'd go, even now!"

"You just let me see you get on that ship!" said Mrs. Damon in a low voice close to her husband's ear.

"Oh, I'm not going to, my dear! I'm not going to!" he said hastily.

"Ready?" called the official starter.

"Ready!" answered Tom Swift.

"Ready!" came from the other contestants.

"Boom!" echoed the big cannon.

"They're off!" yelled the crowd, and with a roar of her exhaust pipes the *Air Monarch* shot across the field, followed by several other craft seeking to beat her.

The globe-circling race had started!

CHAPTER X

ACROSS THE OCEAN

"THERE goes the *Red Arrow*!" said Ned, standing beside Tom in the control cabin as the *Air Monarch* mounted the air and they could look down on the earth. "He made good time!"

"I'll say he did," agreed Tom, who was turning on a little more power, now that his craft was in the air. "Some bus he's got there, too!"

The *Red Arrow* hydroplane was, in truth, a craft not to be despised. Kilborn had left the starting field in a swift automobile. He had given orders that the motors of his hydroplane were to be kept turning over so that he could get aboard and start at once. This he had done, and, as she was moored not far from the aero field, had taken the air only a little behind Tom Swift.

"There goes the dirigible—I mean Modby's," went on Ned, who was viewing the start of the other contestants while Tom attended to the running of his machine.

"He must have had some trouble with his motors," the inventor stated.

"He did," agreed Ned. "He's a bit late in starting. Well, I wish Modby all sorts of luck, but I'm afraid he hasn't much of a chance."

Professor Modby was considered a friendly rival, for he and Tom had been associated in aeroplane research on several occasions. The *Cloud*, as the big dirigible had been named, was now soaring into the air, but her speed was as nothing compared to that of the *Air Monarch*. Ned noticed, however, that the *Red Arrow* was a very fast machine, and she might prove a dangerous rival, for she was not as heavy as Tom's craft.

"But this is only the beginning," murmured the young inventor, as he noticed how the *Red Arrow* was picking up speed. "We've got to go twenty days yet—more or less," he added, with a grim smile."

Bob Denman, the millionaire sport, had started from the flying field in a rush in one of his high-powered cars. He was off to catch a special train that would hurry him across the United States. He said he would take a special steamer in San Francisco, cross the Pacific, and then, by means of other special trains and boats, endeavor to come in ahead of everybody else.

Jed Kimball, in an aeroplane somewhat like

the *Red Arrow*, also got off to a good start, but some of the other contestants, especially one in a free balloon, did not have such good luck. One of the big hydrogen gas balloons, of which there were several, was caught by an adverse wind soon after rising and entangled in a clump of trees. Tom and Ned had only time to observe this before they were out of sight, speeding on their way over the Atlantic Ocean.

There was no rule as to what direction the contestants must take in this world race. They could start east or west. Those who started west would cross the United States and then go over the Pacific, as Bob Denman planned to do. They would come to the Japanese Islands in due time, cross China, Persia, the top of Africa, perhaps go across the Mediterranean Sea and so reach the Atlantic. Crossing this they would again reach the eastern shore of America and so complete the circuit.

Tom's plan, and that of the *Red Arrow* and several hydroplanes, dirigibles and other aircraft, was to cross the Atlantic first, then go over Europe and Asia, reach the Pacific, and eventually get to the western coast of the United States, crossing that as the last leg of their journey.

When he had seen to it that the motors were working well under the care of Peltok, Brinkley

and Hartman, Tom let the linguistic foreigner take the controls while he and Ned went to their stateroom, which they shared in common, to go over the route in detail.

"This is going to be our route, Ned," said Tom, as he laid a large map on the table and pointed to a red line approximately running along the fortieth degree of north latitude. "We'll cruise due east from where we started, bearing a bit south, and head for the Azores."

"Going to land there?"

"Not unless we have to," said Tom. "We're going to keep moving all the while."

"At the rate of two hundred and fifty miles an hour," said Ned, "we can——"

"We can't keep up a speed of two fifty per hour for more than a little stretch at a time," interrupted Tom. "In fact, I don't expect to reach that rate for another day. It would rack my engines to pieces to maintain it for any length of time. I can do it, but I'm going to save that burst of speed for emergencies. No, if we can average a hundred miles an hour in the air we'll be doing well. And when we have to land and taxi along, or when we have to go as a boat, we won't do that, of course."

"Where do you go from the Azores?" asked Ned.

"We don't exactly go to the Azores Islands,"

corrected Tom. "We'll fly above them if I hit the right route. From there we head for Spain, move along across the Mediterranean and over the northern part of Turkey and then across China. We may land in the Philippines before we complete the trip across the Pacific."

"And then from there you'll head for San Francisco I take it?" asked Ned.

"That's the idea. You know, don't you, that I had the Airline Express sent on to 'Frisco to be held in readiness there?"

"Yes, you told me you did," admitted Ned. "But I didn't quite grasp the idea."

"Simply providing for emergencies," went on Tom. "The *Air Monarch* may have a breakdown when we get over the United States again, and if an Express machine is waiting for me I can just hop aboard her and complete the trip—on time I hope."

Ned turned again to the route map, and then glanced out of the cabin windows.

"We seem to be having it all our own way for the present. Nothing else is in sight," he stated.

"It's getting a bit hazy," remarked Tom as he glanced at several gages and distance indicators on the wall. "We're over the ocean now."

"Over the Atlantic so soon?" cried Ned. "That's right, quite a way out too, I hope," he added. "Let's see what Peltok says."

They went to the steering compartment where the man who spoke so many languages was guiding the craft.

"We are a hundred miles out from the end of Long Island," Peltoc stated, after making some computations.

"Whew!" whistled Ned. "A hundred miles and we haven't been going an hour."

"Oh, yes, it's a little longer than that," said Peltok, with a smile. "But we are making fairly good time. I have increased the speed a little," he said to Tom.

"That's right. We want to make all the distance we can while the weather is good and while we have daylight. Night flying is going to slow us up a bit. If you don't believe you're pretty well out, Ned, look down!" invited Tom.

He pulled a lever and Ned gave a cry as the bottom of the craft seemed to open, disclosing below him heaving ocean waves!

CHAPTER XI

FORCED DOWN

"WHAT'S the matter?" asked Tom, with a smile, as he beheld Ned's amazement.

"I thought the bottom was dropping out of the machine!" gasped the financial manager of the Swift concern.

"Just a plate glass window in the floor," Tom explained, with a chuckle. "It enables us to take a look below without sticking our heads out of the windows and looking over the side. Yes, that's the old Atlantic there," and he pointed to the heaving, foam-tipped waves that were lazily surging far down beneath them.

The *Air Monarch* was now well up and moving eastward at fast speed. As the motors warmed up, Peltok fed them more and more gasoline until they were approaching their maximum.

Meanwhile Brinkley and Hartman were going about adjusting bearings, putting oil where it was needed, and doing general work. Being

a new machine, the *Air Monarch* needed more oil than a craft that had been run some time and whose bearings would have been worn to smoothness.

"Well, we're on our way," remarked Tom, as he moved about the cabin looking at the indicators, noting the speed, and having a general eye to the performance of his newest and pet craft. "We're on our way, and in less than three weeks, if we have luck, we'll be right back where we started."

"Do you think you can do it?" asked Ned.

Tom did not answer for a moment. Then, with a serious look on his face, he said:

"It's taking a big chance, Ned. Twenty days is a very short time to circle the world. I know we talk about aeroplanes that do two hundred and fifty miles an hour. And if one could keep that up for a hundred hours the trick would be pulled off in about four days. But no machine made can keep that speed up constantly. Not enough gasoline or oil could be carried for a continuous flight of that kind. A man would have to come down several times to replenish.

"Of course the hundred thousand dollar prize offer doesn't specify that the world must be circled in twenty days. If it takes thirty days to do it, the one who gets under the wire first, having used up less time than any of the others,

will win. But there's dad's bet of twenty thousand with Mr. Burch and Mr. Trace. That specifies twenty days."

"Evidently they don't think you have much of a chance, Tom," said Ned. "They didn't even come to Long Island to see you start."

"No, they weren't there. And I guess they think they have dad's money won. But though they couldn't be there, they were sports enough to wish me good luck in a telegram. It came just before we took off. But I don't really believe they think their money is in danger. I'm going to do my best, though, to win for dad's sake and my own. That hundred thousand will come in very useful, Ned."

"I'll say it will! You've been spending a lot lately, and you owe Mr. Jacks fifteen thousand."

"We'll pay him!" Tom said with a determined air. "We'll be on easy street if I can flash home a winner. And she's running mighty sweet now," he added, as he listened to the purr and hum of the motors and the throb of the propellers.

A look around them showed no other contesting aircraft in sight. But that did not mean none were racing them for the prize. The *Red Arrow* might be close by, hidden from them in the mist. Below them were several motor boats and a steamer or two, and whether or not any of

these were the craft trying for the prize Tom Swift did not know.

"Do you think Kilborn and his crowd will make any trouble for you?" asked Ned when he and Tom were sitting at ease, lulled by the speedy, even motion of their craft.

"I think they'll try," was the answer. "They're desperate, for some reason or other. One is that they want to beat me, of course. Another is that there has been for some time a trade rivalry between us. As you know, I've been making aeroplanes for a concern and Kilborn and his crowd are trying to get the business away from me. If I win this international race it will be a big feather in my cap. The Swift aeroplanes will get a big advertisement out of it."

"I see," murmured Ned.

Brinkley appeared in the doorway of the room where Tom and Ned were sitting. There was a grin on the face of the former tank man.

"What is it?" asked Tom.

"Come and get it!" answered the other.

"Grub ready so soon?" asked Ned, who recognized the cook's method of summoning them to eat.

"Grub is ready," repeated Brinkley.

"Time went mighty fast," Tom said. "I for-

got all about cooking or eating. We really didn't settle on who was to be cook."

"Well, Joe sort of wished it onto me," went on Brinkley, with another grin. "I had a hand in it when I was running a tank over on the other side," he went on, "and if you want me to, I'll keep at it."

"I'll tell you better after I eat this grub you say is ready," laughed Tom.

"That's a fair proposition," admitted Brinkley. "Well, anyhow, it's ready. You two can eat and Joe and I will take a shot at the grub later."

"Yes," assented Tom. "Somebody's got to run the ship."

They went out to the little dining apartment, and appetizing odors greeted the noses of Tom and Ned. They sniffed hungrily and soon were doing full justice to the meal.

"You're elected, Brinkley!" cried Tom when half way through the menu.

"Second the motion!" echoed Ned, who was also doing his full share with knife and fork.

Cooking aboard the *Air Monarch* was done on a gasoline stove. Since no hydrogen gas was carried, as is the case in most dirigibles and balloons that cannot get helium, there was no danger of any explosion from an open flame.

There was plenty of food on board, and Tom planned to buy more whenever a landing was made. He knew he would have to land several times along the world-circling route to enable gasoline, oil and other supplies to be taken aboard.

The meal was nearly over and Tom was calculating how far they had come and what speed they had made so far, while Ned was debating with himself whether he could eat another slice of boiled ham, when there came a series of loud noises from the motor compartment back of the dining salon.

"What's that?" cried Tom starting up.

"One of the main bearings has burned out!" exclaimed Hartman. "Oil feed failed. The bearing's red hot!"

At the same moment the craft began to lose speed. Ned felt her being forced down, for when it does not move fast enough to overcome the pull of gravity, an aeroplane must fall. Slower and slower moved the *Air Monarch*, and lower and lower she sank toward the heaving surface of the Atlantic.

CHAPTER XII

THE HURRICANE

"WHAT'S going to happen, Tom?" asked Ned as he saw his chum leap toward the motor room.

"Are we in danger?"

"In danger of losing time on account of a hot bearing, yes," admitted Tom. "But in no danger as far as being forced down is concerned. I had planned for this—a landing in the sea."

"Our boat-like body will keep us afloat," explained Brinkley to Ned, whose strong point was certainly not mechanics, but finance. "You know we're a hydroplane as well as an aeroplane."

"I had forgotten it for a moment," admitted Tom's chum.

The first alarm over, he watched Tom and the three mechanics so manipulate the *Air Monarch* as to bring her out of the partial nose dive into which she had fallen on losing speed. She was now coming down to the sea on a gentle slant.

"I don't like nose dives!" murmured Tom, remembering the peril which he and Mary had so narrowly escaped from with the help of Brinkley and Hartman.

"We'll make a three point landing," observed Peltok as Tom, taking charge, began to guide his craft toward the waves which Ned could see, through the plate glass bottom in the cabin, rushing, as it were, up to meet them.

Not quite as gently as a feather, but with hardly enough of a jar to spill the water in the glasses on the table which Tom and Ned had quit in such a hurry, the *Air Monarch* sank to the surface of the sea where she rode easily under the influence of a gentle swell.

"Are we going to stay here?" Ned asked, when he found that the craft was making no forward progress.

"Not any longer than we can help," Tom answered. "Every minute counts when you're trying to circle the globe in twenty days. But we'll have to wait for that bearing to cool. Did she chew up the metal?" he asked Peltok, referring to the soft anti-friction lining material which the axle, or shaft, of any fast-moving machine comes in contact with instead of directly on the bearing itself.

"I'm afraid so," was the answer. "But I can cast a new journal for you."

"Good!" exclaimed Tom. "You three had better get something to eat," he added to Brinkley and the others. "Ned and I will stand watch. Not that there's anything we can do until she cools down, though," he added, with a rueful laugh.

Since the machinists had had nothing to eat since early in the morning, before the take-off, they did ample justice to the meal the tank man had gotten ready.

Meanwhile, Tom and Ned went to the engine room to examine the damage. The *Air Monarch* was gently rising and falling on a long swell. Just where they had come down Tom did not know, without taking a marine observation, but he judged it to be perhaps four or five hundred miles off the Atlantic coast—not a bad bit of distance to have covered in this time. But of course he realized he would have to do much better than this to win the race.

It did not take Tom long to find the overheated bearing. It had become red-hot from lack of oil, which was supposed to be fed to it constantly, but it was now cooling down and when it was completely cool the burned anti-friction metal could be cut out and new put in.

"There's what did the damage!" exclaimed Tom as he unscrewed the coupling of a small copper oil feed pipe and took out a lit-

tle ball of what seemed to be rubber. "That kept the oil from cooling the bearing."

"Do you think the *Red Arrow* imps had anything to do with that?" asked Ned.

"It's possible, of course," Tom replied. "But hardly probable. This isn't one of the main bearings, and the oil feed pipe would be hard to get at to tinker with. Hussy and that fellow we caught in the hangar night before last didn't have time to unscrew the coupling, slip in the rubber, and then put it together again. And it was all right when we started.

"What I think is that this bit of rubber came from a gasket—it just naturally worked loose and was forced into the pipe. I use a forced feed oil system. It's just one of those accidents that will happen. Lucky it wasn't any worse."

"Have we got to lay to like this until the bearing is fixed?"

"No," Tom said, after looking over the motors. "We can taxi along on the surface with one motor, but of course not as fast as if the two were working. However, it will help some, and every mile and minute count. Whew, she certainly got hot!" he exclaimed, as he burned himself slightly from putting his hand for too long a period on the defective bearing.

The three machinists were so eager to make repairs and hop off again that they hurried

through their dinner and were soon in the motor room again. There Peltok proved his worth, as did Hartman and Brinkley. They wasted no time, but began taking down the motor.

While the aeroplane man and his tank companion did this, Peltok was busy casting a new bearing, filing it down to a perfect fit so the axle would run smoothly.

"Will it bother you if I start up with one motor?" asked Tom of the three who were working at top speed to finish the repairs in the shortest possible time.

"Not a bit!" Peltok answered. "You can't go very fast with only one motor running, and she'll ride on a pretty even keel, for there is scarcely any sea at all—it's almost a dead calm."

"But it isn't going to remain so long," stated Ned, who knew a little of weather signs.

"Why not?" asked Tom.

"The glass is falling," and Ned pointed to the barometer. "I think we're in for a storm."

"It does look so," remarked Tom, who noted the reading now and compared it with the height of the mercury column when they had started. "I guess we're in for a blow. It will be better to take it up above than down here."

"We'll finish this as soon as we can," said Peltok, but there was no occasion to say that.

Tom and Ned could see that the three were doing their best.

So, having learned that he would not disturb them by sending his craft along, the young inventor started the undamaged motor and soon the *Air Monarch* was moving at fairly rapid speed over the surface of the calm sea. Tom steered by a binnacle compass, heading due east, and knew that every mile he gained was so much to the good.

With the other motor in commission, he knew he could more than double the present speed. But his main reliance was going to be travel in the air, for that was his speediest medium.

After about an hour, during which the craft had sped along for several miles over the sea, they ran into a thick fog, which seemed another indication of a change in the weather.

"Got a fog horn?" asked Ned, as he stood beside Tom in the motor control cabin.

"What for?"

"To signal so we won't run into any ships."

"I guess we won't be down on the sea much longer," Tom said, for he had asked Ned to take the wheel while he went back to note what progress the three mechanics were making. "They have almost finished. We'll be going up directly."

"Glad of it," remarked Ned. "I don't like it down here—not in a fog."

"There's no danger," began Tom, with a laugh. "I'll take a chance——"

He was interrupted by a heavy, throbbing noise in the air over their heads. The fog was too thick to enable them to see what it was, but Ned cried:

"Wind!"

"Of a sort—yes!" admitted Tom. "But it's wind from the propellers of some sort of an aeroplane! There's a craft passing overhead."

When Ned listened more carefully he knew this to be right. Some big dirigible or aeroplane was passing above them, and the throb of her motors and the beat of her propellers could plainly be heard.

"Think that might be the *Red Arrow* passing us?" asked Ned.

"It's possible," Tom admitted. "She's got powerful motors."

They looked upward, trying to pierce the fog, and a moment later the wind began to blow, tearing the blanket of vapor apart. It was just in time for Tom and Ned to see, high up, a great craft heading toward the east. But whether it was the *Red Arrow* or some other machine they could not tell. It seemed likely that it was one

which was racing against Tom for the world circuit prize.

Then the fog drifted in again and there was a wall of white all about them. Ned looked at the glass once more and found that it was still dropping. As he took this in he gave a low whistle.

"It's going to blow and blow soon," he said to Tom. "How much longer are we going to be here?"

"Not much longer, I hope," answered the young inventor a bit impatiently. The sight of that big craft passing overhead had made him apprehensive. "I'll go and find out. Keep her on this course, Ned," and he turned the steering wheel over to his chum.

Hardly had Tom gone back to the motor room than the voice of Peltok was heard exclaiming:

"She's done! The bearing is finished. Now we can use the other engine!"

This was good news, and a few minutes later, when it was made certain that the oil feed system was working properly, the second motor was started and the *Air Monarch* began to gather speed.

"We'll be up in a minute," Tom said, taking the wheel from Ned. Hardly had he spoken than as if a giant's breath had blown it away, the fog vanished and out of the west rushed a

wind of great force. It caught the craft broadside on and heeled her over so far that she was in danger of capsizing. But Tom speeded up the starboard motor and pulled the machine around just in time.

"Go on up!" yelled Peltok. "There's a hurricane coming! Go on up!"

"Up she is!" echoed Tom Swift. With a motion of his hand he turned more gasoline into the motors and they roared out as if eager to do their work. The *Air Monarch* surged forward over the surface of the sea, gathering speed to enable her to lift herself into the air.

Just as Tom was about to pull the lever of the rear elevating rudder planes, the hurricane burst with all its force around the craft, twirling her about, howling through the struts and wire stays like ten thousand demons and sending a shower of spray clear over the top wings.

"We're in for it now!" yelled Tom, as he headed the craft up on a long slant.

CHAPTER XIII

A CLOSE CALL

DOUBTFUL it was, for what seemed a long time, whether or not the *Air Monarch* would justify her name and rise from the water. She seemed held fast to the surface of the sea along which the craft was being driven by the force of her propellers whirled by the two powerful motors, now both working well.

"Will she make it, Tom?" cried Ned, above the roar and howl of the hurricane which seemed bent on destroying the globe-circling craft.

"Can't tell yet," was the grim answer. "We're just about holding our own and no more!"

Tom had headed his craft into the very teeth of the strong wind, for this is the proper way in which to make an aeroplane rise. If the pilot should try to rise with the wind the chances are that his ship's tail would flip up and he'd find himself standing on his head with the nose of the machine buried deep in the earth.

But such was the power of the wind, and such

its peculiar downward pressing force that, for a time, it seemed that the ship would not rise. She seemed held down as by a giant's hands.

"We've got to get up more speed!" yelled Tom to those in the motor room.

"I'm giving her all the gas she'll take!" shouted Peltok.

"Turn on the super-charger!" the young inventor directed. "If ever we needed that highest gas of mine we need it now!"

He referred to the new gasoline he had been experimenting on when he had to leap through the window of his shop to avoid being blown up.

"That ought to do the trick!" exclaimed Hartman, who had seen some demonstrations of the new fuel.

"Turn it on," cried Tom again, and his mechanics made haste to carry out this order.

Meanwhile the hurricane was increasing in violence. The wind howled as if in rage that any man-made craft should try to fight it. The sea, too, was whipped into salty spray and the waves were rapidly becoming larger and more dangerous. Two or three times water sprayed all the way over the *Air Monarch*, and when Ned discovered that some was entering the interior of the ship through an open window he hastened to close it.

"All ready, Chief!" called Brinkley, addressing Tom Swift. "Here goes for the super-charger!"

"If she doesn't rise now she never will!" murmured Tom as he yanked the throttle around to turn on full power with the new fuel, a tank of which had been hastily connected with the carburetor.

If the motors had hummed and purred before, they fairly roared now with this new form of gas, and Tom exulted in his heart.

"It wouldn't do to use that all the while, though," he said to himself. "It would rack the engines to pieces. But it's good to have in an emergency. Now let's see if we can take off."

The craft was now skimming the surface of the sea at a greater speed than she had ever before attained on water. Tom pulled the throttle back another notch, advanced his sparking system a trifle, and then pulled the handle that tilted the tail rudder. Until this was done the *Air Monarch* would sail along on an even keel. But with the back rudder tilted so that a current of air would strike on the lower surface, the effect would be to elevate the nose of the ship and send it up into the air on a long slant.

"I hope she'll work," Tom told himself, as he pulled the lever.

There came another burst of wind, and now it began to rain in a torrent, while lightning flashed from the cloud-obscured sky and the deep booming of thunder seemed to shake the craft from stem to stern.

The machine quivered. It seemed to be a struggle between the elements of air and water as to which should claim her, but in the end the air won.

"We're rising!" cried Ned, who stood behind Tom. But the young inventor had already noted on the altitude gage that the machine was leaving the sea and going up.

"Not much too soon, either!" muttered Peltok, who stood with the two machinists in the motor room where another gage showed them that the fight was being won.

"We're all right now," said Tom with an air of relief as he guided his craft on a long slant up through the wind, the rain, the lightning and thunder. "We're all right now."

The engines were still rotating furiously under the power of the new gas, and Tom kept them at this speed until he was well up above the surface of the sea. Then, turning the craft about, to take advantage of the wind, instead of heading into it, he ordered the ordinary motor fuel gasoline turned on and slowed down his ship.

Slowed down, yes, but the *Air Monarch* was still moving along at a terrific speed. And Tom knew that speed was necessary, for he had lost considerable time. He had counted on some delays, but the fewer of these there were the better. And Tom preferred to have them come, if they must, when he was back again on United States soil. For if the *Air Monarch* failed him then, he could use his Airline Express.

Up, up and up soared the powerful craft, boring her way through the storm. Now she was where she properly belonged, for though Tom's craft could travel on land or water she was designed, primarily, for the air.

"Going above the storm, Tom?" asked Ned when things were more nearly normal aboard.

"Going to try," was the answer. "But there's a big area of disturbance, I think."

So it proved. For it took an hour of hard work before Tom could force his machine to climb high enough to be above the howling wind and rattling rain. But then the *Air Monarch* found herself in a calm atmosphere, above the clouds with the sun shining, and in that peaceful region, far away from the hurricane and the lashing sea, she sailed along on her journey.

"Well, she came out of that pretty well," re-

marked the young inventor as he turned the wheel over to Peltok while he went with Ned to work out their position. Ned was good at figures, and intricate calculations were necessary to determine how many miles had been traveled in the machine.

"She done noble, as Eradicate would say," agreed Ned. "But it's getting on toward dark, Tom," he observed, as he noted the position of the sun.

"That's right. It will soon be night. But I think we can still travel on."

"About where do you guess we are?"

"About half-way across the Atlantic, I think. But we've got to work it out. We lost considerable by being forced down."

When the observations had been made and the computation completed it was found that Tom was a little off—that about twelve hundred miles had been covered in the twelve hours since the start. But this was very good, considering the time lost, and Tom felt that the first day, or rather, the first half day, was a successful one.

As evening came on, supper was got ready and served several miles high in the air. But eating thus was no longer a novelty to Tom and Ned. They had done it too often on other daring cruises.

They had been blown somewhat off their course by the hurricane, but managed to get back on it when the stars began to appear and then, the night watches having been arranged, the *Air Monarch* was driven along through the darkness. There was little danger in thus traveling at night unless some accident should befall the craft itself. Though a number of air machines had started in the great race, Tom had no fear of colliding with them.

"I think the *Red Arrow* is ahead of us, though," he said to his chum as they made ready to turn in for a sleep.

"It doesn't seem to worry you."

"What's the use of worrying? The race has hardly begun yet. I'm satisfied."

Through the hours of darkness the craft was driven on, the five taking turns in steering, even Ned being able to keep on the course by means of observing several compasses, though he did not attempt to regulate the motors, which, however, were practically automatic once they were started.

A rosy tint in the east apprised Tom and his friends that the sun was rising and that morning was at hand. It was the second day of the great race, and a hasty calculation, while Brinkley was preparing breakfast, told Tom that they were approaching the coast of Spain.

A few hours later Ned, taking an observation, exclaimed:

"There's some sort of a big harbor down there. Might be a good place to land, Tom, since you say we've about crossed the Atlantic. What place do you think that is?"

"Lisbon, Portugal!" exclaimed Peltok. "I know it. I have been there many times. It is a good place to land!"

"Then we'll go down!" decided Tom. "We'll get oil and gas. We've done pretty well to cross the Atlantic in about twenty-four hours. But that doesn't mean we can always make as good time as that."

Amid screams from the whistles of steamers in the Lisbon harbor, the big craft slowly settled down, Tom, who was steering, picking out a clear space in which to anchor.

Like a great bird, the *Air Monarch* dropped into the peaceful waters and slowly came to a stop. At once there were signs of activity on all the vessels within sight while the wharves alongshore became black with a mass of humanity drawn by the news of the arrival of the strange craft.

"Seems as if they were expecting us," observed Ned.

"Shouldn't wonder," agreed Tom. "This world race has attracted a lot of attention."

"Do you think any of the other contestants are here, or have been here and gone?" went on Ned.

"We'll soon find out," his chum answered.

Suddenly Hartman uttered a cry and pointed upward. There, hovering above them, was a great craft, painted red—a hydroplane—and it seemed to be steering straight for them.

"The *Red Arrow*!" cried Tom. "We were ahead of him after all!"

"But he's going to land on top of us!" cried Ned. "Look out! Keep off!" he yelled.

The *Red Arrow* came down swiftly, and it was a close call for the *Air Monarch* as Kilborn's craft landed, skimmed over the water, and came within a few feet of crashing into Tom's craft.

CHAPTER XIV

WHIZZING BULLETS

HARDLY had the *Red Arrow* stopped, some of her men coming out of the cabin to drop a light anchor, than Tom ran to the prow of his craft, where there was a little landing stage. Seeing Kilborn tantalizingly smiling at him, the young inventor cried:

"What do you mean by that?"

"Mean by what?" sneered the pilot of the rival plane.

"By landing so close to me that you nearly grazed my wing tips? Don't you know how to make a landing yet? Seems to me there was room enough for even an amateur!"

Kilborn's face turned an angry red at hearing this taunt.

"I know as much about running a bus as you do!" he retorted.

"You don't seem to!" fired back Tom. "After this you keep your distance!"

"Aw, you don't know what you're talking about!" sneered Kilborn.

"Don't I?" retorted Tom. "Well I think I do! And, what's more, I have a strong suspicion that you wouldn't have cared much if you had crashed into me. It would have given you a chance to take off ahead of me. But you didn't pull your trick, did you?"

"I wasn't trying any trick!" snapped Kilborn. "And if you accuse me of——"

"I'm not exactly accusing you," broke in the young inventor. "But I have my suspicions and I'm going to watch you. Don't forget that your tool Hussy and the fellow with him are still in jail!"

"I don't know anything about Hussy!" stormed the owner of the *Red Arrow*.

"I think you do," was Tom's reply. "But keep away from me and my machine—that's all I ask. I can beat you in a fair race, and I don't want any dirty work, nor will I stand for it!"

Tom turned and went back in his ship. The talk was in English of course, and few of the Portuguese who had gathered about to view the strange craft knew what it was about.

"He sure tried to foul you," declared Ned when his chum had rejoined him. "He had plenty of room to land clear."

"More than he needed," agreed Peltok. "That man will bear watching, Mr. Swift!"

"And we'll watch him!" replied Tom.

"Here come a couple more of the contestants, I guess," called Hartman as he pointed upward, where two specks, like big birds, were observed in the sky.

"Either that, or it's a welcoming delegation of Portuguese airmen," suggested Tom.

But the first surmise proved correct, and a little later two big hydroplanes, one piloted by Jed Kimball and the other by Harry Walton, whom Tom knew slightly, settled down in Lisbon harbor.

This harbor, while not an official landing, since the race was a go-as-you-please one, was the objective of most of the contestants who flew eastward in aircraft. Some were not able to cross the Atlantic in one hop, and were obliged to stop at the Azores. But the bigger machines, including Tom's, the *Red Arrow*, and the two to arrive later, carried fuel enough for the longer journey.

"They're making almost as good time as you made, Tom," remarked Ned when informal greetings had been exchanged with the two latest arrivals. "Doesn't that mean they'll give you a hard rub?"

"You forget, Ned," said the inventor, "that we were forced down by a hot bearing and lost a lot of time. Even with that, we beat the other three. If we did that, bucking the hurricane

as we did, it shows we are a lot speedier than they are, unless they, too, were delayed. We must find out about that, but we'll have to be diplomatic. No use letting them know just how speedy we are."

While oil and gas, together with some more food and other supplies, were being taken aboard all four of the competing craft, Tom signaled a small boat and visited Jed Kimball.

"Run into any bad weather on the way over?" Tom asked casually.

"Not a bit," was the answer. "Had smooth sailing all the time. And so did Walton. He and I were close together on the way over."

Tom's heart rejoiced at this. It meant that the other craft had pushed their engines to the limit and had been traveling steadily in clear air, only to arrive after he did.

"And we lost considerable time," said Tom to Ned when he was back on board the *Air Monarch*. "That means we have a lot the best of them. The only one I'm in doubt of is the *Red Arrow*. I'm not friendly enough with Kilborn to ask him if he had any delays. If he did, and yet came in soon after us, it means he is pretty nearly as fast as we are. But if he came right along without a stop, it means we've got him beat."

"Let's see if Brinkley or Hartman can't pick

up a bit of information," suggested Ned. "They're going ashore for a half hour, and I notice some of the *Red Arrow's* crew also going to take shore leave."

"That might be a good way," agreed Tom, and he instructed the two mechanics to get into casual conversation, if they could, with the men from Kilborn's craft, but, at the same time, not to give a hint of their own speed.

Hartman and Brinkley managed to get friendly with some mechanics from the *Red Arrow*, but the information they secured was not the most reassuring to Tom. It developed that his most formidable rival had also been delayed by the hurricane, though not forced down, being, however, blown far off the course.

"Then since he arrived about the time we did," said Tom, talking the matter over with Ned, "it means that he's going almost as fast as we are. I'm afraid we're going to have trouble with Kilborn."

"Do you really think he has a chance to beat you?"

"He has a good chance. The only thing is that if he gets disabled so he can't travel in the air, he can't do very much on the water and nothing at all on land. I might have him there. But it's only a chance. We've got our work cut out for us, Ned!"

"Well, then, the sooner we get away from here the better!" suggested the financial manager, and his chum agreed with him.

The work of taking on the gas, oil and other supplies was hastened, and at last the *Air Monarch* was again ready to hop off. The mechanics had gone carefully over every part of the motors, and they were tuned up to the highest notch of efficiency.

"Well, let's go!" called Tom when, about three hours after landing in the Lisbon harbor, they were ready to leave again.

The motors roared as the gas was turned on when the starters had turned the flywheels over, and Tom was about to guide his craft down a long, wide lane of water in the bay when Ned exclaimed:

"There goes the *Red Arrow*!"

Tom turned to see the rival craft making ready to take off, and then he suddenly shut down the motors and let his craft come to a slow stop while the other increased her speed and was ready to take the air.

"What's the idea?" cried Ned. "Has anything happened?"

"No. But something might if I tried to take off just when Kilborn did," said Tom quietly. "There's too much chance of a collision—plan-

ned or accidental. Let him get up—I'll follow. I can do as I please then. Let him go!"

It was evident that the *Red Arrow* had been waiting for the *Air Monarch* to lead the way, for just as soon as Tom started the other craft had followed, and when Tom shut down it appeared to puzzle Kilborn and his men. However, they must have imagined that it was only a temporary halt, for they roared on their way, finally leaping into the air from a foam-crested wave and speeding off ahead of Tom Swift.

"Let him go!" the young inventor said. "I can pass him when I need to. But I want a clear field."

A few minutes later Tom started his motors again, and his craft was in the air shortly before the other two hydroplanes took off. But by this time the *Red Arrow* was only a speck in the sky.

"Hope he won't get too far ahead!" mused Ned.

"I'm not worrying," declared Tom Swift.

Up and up soared the *Air Monarch* and when she was high enough Tom straightened her out and sent her ahead on an eastern course, steering over Spain, the Mediterranean Sea, the lower part of Italy, and, in turn, across Turkey.

It was when sailing rather low over a wooded

section of this latter country that something happened which showed Tom how dangerous his trip might be.

He, with Ned, was leaning out of the window of the forward cabin looking down below and trying to figure out just where they were when Ned called:

"Look at the horsemen!"

Below them was a squad of Turks riding along and seemingly much excited by the airship over them. The motors, though muffled, were making too much noise for Tom and Ned to hear what the horsemen were shouting, but their actions were plainly discernible.

Suddenly some of them brought their guns around and aimed up at the airship.

"Look out!" cried Ned. "They're going to shoot!"

"Let them!" chuckled Tom. "They must be uncivilized fellows who have never seen or heard of an aeroplane before. They can't hit us up here!"

"I wouldn't be so sure of that," warned Ned. "Better go a bit higher."

"But I want to see what river that is we're coming to," Tom said. "I need to be low down to make an observation."

He had hardly ceased speaking when several puffs of smoke came from the horsemen below,

and though the reports of the rifles could scarcely be heard, there was no doubt as to the firing.

"Duck!" yelled Ned as he caught the hum of whizzing bullets.

Suddenly he saw Tom give a start and fall back from the window.

"He's hit!" cried Ned, springing to his chum's side as he yelled to Peltok, who was at the wheel: "Go up! Go up! We're being fired on!"

CHAPTER XV

YELLOW GYPSIES

RAPIDLY, as soon as Peltok pulled the elevating lever, the machine shot upward and was quickly beyond rifle distance, though the last glimpse Ned had of the mounted hunters they were still firing at the aircraft.

But Ned had other thoughts than those of the men who, through fear or anger, had fired on the *Air Monarch*. He had seen Tom start back, wince, and disappear from the window.

"Are you hit, Tom?" Ned yelled, as he drew in his head and had a glimpse of his chum swaying in the middle of the forward cabin. "Did they get you?"

As if in a daze Tom put his hand to his head and took off his cap. There was a queer look on his face as he looked at a neat, round hole through the cap's visor, close to where it set on his head.

"They missed you!" Ned joyfully cried when he saw this. "But it was a narrow squeak, Tom!"

Holding the punctured cap in his left hand, Tom put his right hand to his head and when he brought his fingers down there was a little smear of blood on them.

"You're hit—after all!" gasped Ned.

"No, just a graze," and Tom found his voice for the first time since the shooting. "It was a close call," he went on. "It fairly had me going for a moment or two. That bullet must have creased me, Ned. It skimmed right past my head. Yes, I was creased."

This is a term used by Westerners to indicate that a bullet grazes a man or an animal. The effect, while not serious, is to render the victim incapable of speech or action for a short time. Often wild horses are subdued in that way. Needless to say, it takes a sure shot to "crease" a beast and not send the bullet deep enough to kill. In the case of the hunters firing from below on the airship it was undoubtedly accidental.

"It was just a graze," declared Tom again, and an examination showed this to be the case. The bullet had buried itself in the upper part of the window frame after piercing Tom's cap and drawing a little blood. The wound was treated with an antiseptic solution, and then, feeling more like himself, Tom prepared to ascertain their position.

They had soon left the hunters behind, and

doubtless those wild riders had a strange tale to tell around the campfire that night.

By calculating their speed and distance and by identifying certain landmarks, Tom made certain that they were over Turkey—and the wilder part of that country.

"Well, I think we're keeping up to our schedule," Tom said that noon as they were cruising along and he and Peltok and Ned were eating an appetizing meal. "So far we have had very good luck, even getting out of the hurricane and over the hot bearing without falling back much. If this keeps up I'll be well within my margin of twenty days."

"The race isn't over yet," said Peltok, who was an experienced aeroplane man. "Wait until we run into some real trouble."

"We'll strike it, of course," admitted Tom. "Couldn't expect not to on a trip like this. But the longer it holds off the better we'll be."

"Hope there aren't any other wild tribes that are going to take pot shots at us," remarked Ned.

"There aren't likely to be," said Peltok who knew this part of the country quite well. "This was some wild tribe, I suppose, that lived in a mountain fastness, or some wild wooded place, and they had never heard of an airship before."

The *Air Monarch* was now running along very easily. The motors were beginning to "find" themselves, the rough spots were wearing down smooth and, as Tom said, the craft was operating like a sewing machine, which seems to be the standard in cases of this sort.

For the first time since leaving the Long Island field, Tom and Ned felt the relief from nervous strain and began to take matters a little easier.

"Guess I'll write some messages home," decided Tom in the afternoon, when he and Ned sat together in the main cabin.

"It wouldn't be a bad idea," agreed the other. "I suppose you'll put the letters out in front for the mail plane to pick up," he added, and there was that in his voice which caused Tom to explain:

"Don't you think I mean it?"

"How in the world are you going to get any dispatches off home from up here? We haven't got a powerful enough wireless to do it—you said that yourself the other day—and——"

"Go slow!" advised Tom, with a chuckle. "This is easy. I'll write some messages—telegrams to be more exact—and you can, too, if you like. We'll enclose them in some tubes I had made for the purpose and drop them when

we pass near some city and see a crowd out watching us. With the messages I'll include a request that they be sent off, and I'll put in some money to pay the toll and also to reward the person who attends to the matter."

"Oh!" exclaimed Ned. "I didn't think of that! Guess I'll write to Helen Morton."

He took it for granted that Tom was going to wire Mary Nestor that, so far, everything was lovely. This Tom did, also writing brief words of greeting to his father, Mr. Damon, and some few others.

These messages were enclosed in strong but light tubes and when the airship passed over the next town, flying low so the crowds could be observed, the messages were dropped. Before the *Air Monarch* flew on, Tom and Ned saw a rush to pick up the tubes, and they felt sure word of their progress would soon be ticking on its way.

It was toward the close of the afternoon that Ned went into the engine room and was surprised to see Hartman and Brinkley standing together near one of the thermometers connected with the water cooling system of the motors. Like an automobile engine, the machinery of some airships must be cooled by water circulating around the cylinder walls. As Ned came upon the two mechanics, he saw

Brinkley pointing to the red indicating column which was higher than usual.

"Anything wrong?" asked Ned, as he saw the two talking.

"This motor is heating up more than I like to see," stated Brinkley.

"Shall I call Tom?" asked Ned.

"Oh, no. Not yet," was the reply.

"Maybe the water is low in the radiator," suggested Hartman. "Let's take a look. Yes, that's it," he went on a moment later. "It needs filling."

As Ned walked on, satisfied that it was only a minor trouble, easily remedied, he heard Brinkley say to his companion:

"It's queer how the water got low. I filled that radiator only a little while before the chief so nearly got shot. I don't see how it could leak out."

"Maybe it doesn't leak," said Hartman. "There may be faster evaporation than usual."

Ned thought no more about it until an hour later when, as night was coming on, there came a sudden slowing of the motors and the craft began losing speed.

"What's the matter?" called Tom, who was on his way to the control cabin. "Why are you slowing down, Peltok?"

"Something's wrong!" was the answer. "One

of the motors is overheating. There seems to be a leak in the water radiator. We'll have to go down to overhaul it."

"Too bad," murmured Tom. "I thought we could gain a little on this leg. But it can't be helped."

In the gathering darkness an open spot amid the forests was picked out where the *Air Monarch* could safely land and rise again after repairs were made.

As the aircraft came gently down to the ground, several scores of evil-looking men, dressed in gay but fantastic clothes and bearing long guns, rushed out from the surrounding trees.

"Looks as if we'd get a warm reception!" exclaimed Tom.

"We shall!" declared Peltok. "These are Yellow Gypsies—one of the worst tribes in Persia. We've got to fight, I'm afraid!"

The airship ceased moving, and as she came to a halt the horde of evil-faced men rushed up to surround the craft.

CHAPTER XVI

TO THE RESCUE

"WHAT are we going to do, Tom?" asked Ned of his chum, beside whom he stood in the forward part of the airship as it settled down in the midst of the Yellow Gypsies.

"Let's wait and see which way the cat jumps," was the answer. "These chaps may not be as bad as Peltok thinks they are."

"They look nasty enough," commented Brinkley.

"I wouldn't like to meet 'em after dark," said Hartman, to which Ned added:

"Well, we're going to be with 'em after dark, all right."

It was evident that this would be the case, for Peltok, who had run back to the motor room after the ship landed, now came out to say:

"There's a puncture in the port radiator. Hole right through it."

"How do you account for that?" asked Tom, quickly.

"Looks like a bullet hole," said the machinist, while the Yellow Gypsies, their number now greatly increased, crowded closer in on the disabled ship.

"Must have come from one of the bullets fired by the Turks," said Tom. "Probably it caused a slow leak, and that's why it didn't develop until just now."

"But what about these chaps?" asked Ned. "They evidently mean business!"

There could be little doubt of this, for, with savage cries, many of the yellow-faced men were swarming over the craft. Their complexions were of a peculiar hue of yellow, somewhat like Chinese, yet they did not have the cast of features of the Celestials.

"They've got their knives out!" cried Ned. "They'll slit the wing fabric, Tom, and then we shall be in bad."

"They won't slit my wing fabric!" the young inventor said, with a chuckle. "It's aluminum. They can't cut it, but they might bend it. Get off there, you yellow beggars!" he yelled at the Gypsies, but they did not seem at all impressed and only laughed sneeringly.

"Let me try to talk to them," suggested Peltok.

"Do you speak their lingo?" asked Hartman. "He talks anything, including United States!"

declared Ned, with a laugh, though the situation was anything but funny. The scowling Yellow Gypsies seemed bent on mischief—as though they resented the coming of the airship.

Peltok took his position at one of the windows, held up his hands for silence, which came grudgingly from the nomads, and began to address them. His words had a peculiar snarling quality.

But what he said seemed to be understood, for there were murmurs among the men as though they were about to make reply. Peltok continued, speaking more rapidly and emphatically.

"What are you telling them?" asked Tom when the interpreter paused for breath.

"I had to romance a little," was the answer. "I said we were strangers from the stars who had come to visit our earthly friends."

"Will they believe you?" asked Tom.

"I don't know," was the doubtful reply. "They don't seem to think I am telling the truth. I tried to impress them with our supernatural origin. I'm sure they never saw an aeroplane before and know nothing about it. But if we could impress them in some way and make them believe we are supernatural characters we might get them to withdraw. I'll try it again."

Once more he addressed the Yellow Gypsies,

but did not seem to be making much of an impression. They hooted and cried sneeringly and more than one shook a gun or a knife at Peltok.

"What are they saying?" asked Tom.

"They say they don't believe me. They say we look just like themselves except for color, and they think this is only a new kind of railroad train, which of course they are more or less familiar with. I'm afraid they're going to rush us."

It did look so, for the Gypsies were now gathering on all sides of the craft, hemming her in. As a matter of fact, even without the savage men, the *Air Monarch* could not have risen until the leaky radiator was repaired.

"If we could only impress them in some way!" murmured Peltok.

"I'll impress them!" cried Tom, starting for the motor control room. "Start the land motor!" he cried to the two machinists.

"What are you going to do?" asked Ned.

"Use our wheels and roll along!" Tom answered. "I'll plow through that bunch if they don't get out of the way, but I think they'll get all right. If we can't sail through the air we'll travel on land until we get out of the Gypsy country. Start the motor!"

There was a special machine for operating the

craft when on land, and Brinkley and Hartman sprang to get this going. Peltok went to their aid, and Ned took his place beside Tom.

The Yellow Gypsies seemed about ready to make the attack, but at the sign of this activity on the strange craft they hung back. This was the very opportunity for which Tom Swift had been waiting.

"Here we go!" he cried, as he pulled the lever meshing the gears of the land wheels. The *Air Monarch* leaped forward, and Tom slued her around until her blunt nose pointed to the crowd where it was thinnest. "I'll ram them!" the inventor shouted.

Some of the Yellow Gypsies seemed to understand what was going to happen and yelled to their companions to leap out of the way. But those directly in front of the craft seemed stubborn, and held their ground.

"You'll run right over them and kill a lot, Tom!" Ned warned. "That may set them wild!"

"I won't run over any of them!" said the other with a grim smile.

The machine was careening on over the uneven ground, but still the Gypsies in front did not budge. And then, when it seemed that the aluminum nose of the craft would push into their midst and the big wheels crush them,

Tom suddenly pulled on a lever over his head as he stood at the steering wheel.

Instantly a white vapor was projected straight into the faces of the Yellow Gypsies. This seemed to knock them over as if a hail of bullets had hit them. They fell in heaps. Tom quickly turned the nose of the *Air Monarch*, and those now in its path scrambled to one side so that a lane was left for Tom to guide his craft down.

Though the windows of the cabin were all closed Ned caught a whiff of a powerful, pungent chemical.

"What is it, Tom?" he cried.

"Ammonia gas!" was the answer. "I rigged up two tubes, forward and aft, to project ammonia. I thought we might get in a tight corner some day, and it would help. We won't get much of it inside here, but it's strong out there!"

And strong it was, for the stuff, though it would have no lasting ill effects, actually knocked the victims down, rendering them helpless.

When those on either side saw what had happened to their comrades in front, the horde of Yellow Gypsies melted away like dew under the hot sun. Tom guided his craft past those who were knocked out, taking care not to run over any, and in a short time had run out of the

forest clearing to a smooth, level road that led onward in the direction he wished to travel.

"Good work, Tom!" cried Ned, when they were safe for at least a time. "That ammonia gas was a wonderful idea!"

Peltok, opening a window at the rear of the ship, which was rapidly moving out of the zone of the powerful smell, called back to the discomfited Gypsies, some of whom were now reviving.

"I told you we were from the stars!" the interpreter said in the Gypsy tongue. "And doubtless you saw not only stars but suns, moons, and comets!"

Then the machine moved onward, now traveling on land, of course, not so fast as in the air.

"But we'll get to some quiet place where we can lay to and mend that leaky radiator," declared Tom.

Presently they reached a broad, level plain which would make an ideal starting field in the morning.

"We'll have to work all night, if necessary, on that radiator," Tom said. "This is our second delay. We can't afford many more."

The Gypsies seemed to have been left behind as night settled down. The travelers were in a lonely stretch of country. For this, however, they were glad. While Tom and Ned got the

supper, the three mechanics worked on the punctured radiator. Presently, in one of the water coils, a bullet was found, undoubtedly fired by the Turkish party.

Mending the leak was not as easy as had been hoped and it was well on toward morning before the *Air Monarch* was again ready to justify her name. It was found to be impossible to travel along on land while repairs were being made, owing to their delicacy. On other occasions this might not be the case.

"Get a little rest, men, and we'll hop off early in the morning," Tom said, and while he and Ned stood watch, the other three got some much needed sleep.

The sun was just tinting the east when the signal for getting under way was once more given, but just as the craft was starting to taxi over the plain, to get momentum to mount toward the sky, there came rushing toward the travelers those same Yellow Gypsies again, only five times as many.

"They're after us this time for sure!" yelled Peltok, who caught some of the threatening yells. "They are going to be revenged on us for what we did last night."

"What a mob!" cried Ned as hundreds of the Gypsies rushed toward the airship, which was all ready to leave.

Tom tried to increase his speed to take off before the angry and savage warriors could approach, but the motors were cold and not running at their best.

"Ram them!" advised Ned, and it seemed to be the only thing to do. Some would, undoubtedly, be killed when the craft crushed its way through them, but she might soon rise above them and all would be well, save that they would probably send a volley of shots after the travelers.

Tom had about decided to do this, terrible as it seemed, when Peltok, who was looking from a rear window cried:

"Here they come! Here they come to the rescue!"

"Who?" asked Ned.

"The forest patrol—like your state police. They'll scatter these Yellow Gypsies!"

Then all those in the airship saw a squad of Persian mounted men sweeping across the plain toward them. This squad at once opened fire on the horde that sought to stay Tom Swift in his world flight.

CHAPTER XVII

KILBORN'S TRICK

"Now you will see a fight!" cried Peltok. "I know those Yellow Gypsies and I know the Persian forest rangers. You will see a pretty fight."

"I didn't start this world flight to witness a skirmish between bandits and the soldiers," said Tom, with grim humor. "I want to get under way again."

"You will presently," predicted Peltok.

In another moment, amid wild shouts, the cavalry opened fire on the Gypsies, some of whom shot in return, though most of the bandits, for they were little less, turned to flee.

There seemed to be a perpetual feud between these two bodies, one representing law and the other crime, for they did not stop to parley, but at once began fighting. And Tom Swift did not flatter himself that the soldiers had come merely to rescue him. No word had been sent asking for help.

"The Gypsies are bad," explained Peltok, "and the forest rangers fight them whenever they can. See! They are on the run now!"

"That's right!" echoed Ned.

"And it's time for us to be on the move!" said Tom. "Get ready!" he called to his helpers.

The advent of the soldiers had scattered the savage men from in front of the aeroplane, and she could now speed over the level place and take off into the air.

A moment later, while the "pretty fight" was still going on, Tom pulled back the lever of the elevating plane. Up shot the *Air Monarch*, and amid yells of surprise from the horsemen, some of whom had evidently not expected the craft to do this, the machine sailed aloft and was soon winging its way toward cloudland, safe from further molestation on the part of the Yellow Gypsies.

"Those rangers, or whatever they are, came in the nick of time," said Tom when he had turned the management of the ship over to Brinkley while he and Ned went to make some calculations regarding their course. "We couldn't have stood much more delay."

"We can make up for lost time now," Ned remarked, and, indeed, the craft was now spinning along faster than it had ever gone before. The repairs had improved the motors.

"Well, we are holding our own, at any rate," Tom said when he and his chum had figured out how far they had come, how much distance yet remained to cover, and how much time they had to do it in. "I hoped we'd be a bit ahead of our schedule when we were near China, but we aren't. Only just above even. But that's better than being behind."

"Are we over China now?" asked Ned, "looking down as if he expected to see a red laundry sign," declared his chum, laughing.

"We shall be soon," answered Tom seriously when his laugh was over. "We'll have to land there, too, for more gas and oil. There's where I arranged to take it on," and he indicated a spot on the map where the eastern Turkestan city of Yarkand was located. "When we leave there we'll head right across the great Chinese Empire, or rather, Republic, as it is now, over the lower edge of the Gobi Desert, perhaps, and then on to the Pacific."

"Why, Tom!" Ned exclaimed with shining eyes, "we've almost won the race already, haven't we?"

"Not by a long shot!" exclaimed Tom emphatically. "The hardest part of the trip is yet before us, and I fear the journey over the Pacific more than anything else!"

"Why?"

"On account of the storms—especially in the vicinity of the China coast and the Japanese islands. We may run into a typhoon."

"Not so good," murmured Ned, as he gazed at the map.

"Oh, well, we sha'n't worry about that until we get there," observed Tom more cheerfully. "We're on our way, anyhow," and indeed they were, with the wonderful machine throbbing her course through space.

Tom Swift well realized that he must make his best speed while in the air. Though his craft could do fairly well on land or in the water, the less actual distance he had to travel on *aqua pura* or *terra firma* the better chance he would have of winning the race. His most feared rival—Kilborn in the *Red Arrow*—could travel only in the air, and would keep to that medium. Though of course, having a hydroplane, he could, to a certain extent, move over the water.

"But the race will be decided by air travel," said Tom, and to this end he determined to devote all his energies.

It was shortly after noon, when Brinkley had served an appetizing meal in the little cabin, that Peltok, who had been told by Tom what course to follow, announced that they were approaching Yarkand.

"Land there!" ordered Tom. "I don't know

just how near our oil and gas supply in Yarkand is to our landing field, but pick out the best spot and we can have the supplies brought out to us."

"Right!" exclaimed the navigator, and a little later the big craft came to a gentle stop on a big plain on the farther edge of which was the city.

No sooner had the *Air Monarch* landed than she was surrounded by a swarm of curious natives, a sort of a cross between a Chinese and an Indian, Ned declared. They were friendly, however, and laughed with glee as they beheld the "foreign devils" and their queer craft.

Here Peltok's linguistic abilities were useful, for he was soon talking with the natives "like a house afire," as Tom said, and in a little while the interpreter announced that he had arranged for Tom's supply of oil and gas to be brought out.

"Then sha'n't we take this chance to stretch our legs?" proposed Tom to Ned. "We'll walk about a bit and the mechanics will have time to tune up the motors. I don't like the way the starboard one is behaving."

He gave his instructions to Brinkley and Hartman, and then, with Peltok looking after things, uttering dire threats in their own language to the Turkestan natives, who seemed to

want to pull the machinery apart, Tom and Ned strolled about. They would have about an hour to wait, and decided to go into the ancient city.

As they were entering it, Ned pointed off to the left and uttered a cry of surprise.

"There's the *Red Arrow*!" he said.

"That's right!" agreed Tom, as he caught sight of Kilborn's big, crimson hydroplane circling about as if preparing for a landing. "He's following me close."

"But he isn't going to land near us," commented Ned, for the *Red Arrow* was heading down on a different part of the plain from that occupied by Tom Swift's craft.

"Glad of it," the inventor remarked. "I don't want any more trouble with him. He's a crook!"

Then the two young men forgot their anxieties in viewing the wonders of the old place, while curious natives crowded about them. They wandered into one of the bazaars, where Tom bought some trinkets for Mary and Ned a souvenir for Helen.

"And while we're here," said Tom to his chum, "we can mail some postcards back home. We may not get another chance."

"Good idea," agreed Ned.

They were in the local post-office, to them a

queer sort of place, where they found a native who could speak enough English to tell them what they wanted to know about stamps and cards and the mails.

While they were writing their messages, Ned observed two men, who seemed to be officials of some sort, hurriedly enter the post-office and talk with the man who had acted as interpreter. But the young man gave this scene little thought until he and Tom were ready to leave.

Then Ned saw these same two officials barring their way out. Tom also became aware of something and exclaimed, respectfully enough:

"One side, please! We're in a hurry to get back to our ship!"

But the two officers did not move, and one drew from its scabbard an ugly, curved sword.

"Look out, Tom," warned Ned in a low voice. "This looks like trouble!"

"It will be of their making, not ours!" snapped Tom. "What's the idea?" he went on, for he was anxious to start off again. "Get out of the way!" he ordered the man with the drawn sword. "Tell him he's making a mistake," he said to the man who had translated the request for stamps and cards.

There was a lively interchange of words between the officers and the interpreter, and the

latter, with a shrug of his shoulders, turned to Tom and Ned, saying:

"You cannot go!"

"Can't go where?"

"Away from here. You are under arrest!"

"Under arrest? Nonsense!" yelled Tom Swift. "What for?"

"It seems you have no official permission to land your airship near the city," the interpreter answered. "You must be taken to jail!"

"It's a plot, Tom!" exclaimed Ned. "It's a trick on the part of Kilborn to delay us!"

"I'm afraid it is," said Tom in a low voice. "We've got to get out of this in some way. Stand by me now, Ned! I'll see what a little strategy will do!"

Tom turned toward the two officers, a grim look on his face.

CHAPTER XVIII

CHINESE BANDITS

TALKING rapidly in his own language, the officer with the sword said something to the man who had acted as interpreter before Tom could say anything further.

"What's he talking about?" Ned wanted to know.

"He say if you be ready he take you to jail now. Judge hear you talk to-morrow," was the interpreter's answer.

"Oh, he'll hold us for a hearing to-morrow, will he?" snapped out Tom Swift. "That doesn't suit me. Look here," he went on, to Yal, which the interpreter had said was his name, "ask him how it is he doesn't arrest that other fellow who landed not far from me. The red airship! Why didn't he arrest that pilot? Kilborn his name is."

"I ask," offered Yal, and there was more talk before he turned to Tom and Ned, saying:

"Red machine man he have permit to land. He send money on for it week ago."

"That's a point we missed," remarked Tom to Ned. "And I'm pretty sure Kilborn put up this game on us. As soon as he landed and saw we were here, he bribed these fellows to arrest us. I don't believe there's any permit needed at all."

"Well, what can you do about it?" asked Ned. "They've got the upper hand of us."

Truly it seemed so, for now a squad of native soldiers, ugly and unkempt enough but armed with swords and guns, came swarming around the post-office. One of the two officers who had arrested Tom and Ned took charge of the squad.

"I'm going to buy a permit here and now," Tom said, with a smile. "There's no use trying to fight these fellows except with money. Look here," he went on to Yal. "Tell that officer I'm sorry I didn't know about a permit, but I'm willing to pay for one now and also pay him for his trouble in getting it, and I'll pay you for translating this to him."

At this the eyes of the interpreter sparkled, as did those of the two officers when Tom took out some United States gold pieces. Gold speaks a universal language, and when Tom had clinked the pieces in his hands a few times there was a quick exchange of spitfire language between Yal and the tallest of the two officers. Then Yal said:

"Mebby so he get you a permit for money."

"Have him try," said Tom, with a significant smile, as he passed over some of the gold pieces.

The tall officer hurried away while his companion arranged the ragged, dirty soldiers rather in the form of a bodyguard about the two aviators than as a squad sent to arrest them.

"I think everything is going to come out all right," said Tom to his chum.

It did; for a few minutes later the tall officer, now all smiles, came hurrying back, bearing a paper covered with big red and gold seals. This he handed to Tom while Yal said:

"Him got permit for you. Now you can go—for a little more gold!" and his eyes gleamed greedily.

"I guess it's worth the money," commented Tom, as he handed over the remaining five dollar gold pieces, "if it's only to get the best of that skunk Kilborn."

Some orders were shouted to the soldiers, they in turn yelled at the rabble, and Tom and Ned were allowed to walk out as they pleased. They lost no time in hastening back to their craft, where they found that the work of taking on the oil, gas, and other supplies had been completed.

Peltok was pacing about, looking anxiously up and down. At the sight of the two young men, who were followed by a crowd of boys, he said:

"I was afraid something had happened. That Kilborn was sneaking around here, looking as tickled as a cat with cream on her whiskers."

"Something did happen," explained Tom. "And that Kilborn won't be so pleased the next time he calls."

"Here he is now," said Ned in a low voice as the pilot of the *Red Arrow* was observed pushing his way through the crowd. His craft could be seen off in the distance down in a little hollow. He, too, it appeared, had landed for supplies.

At the sight of Tom and Ned about to enter the cabin of the *Air Monarch*, the face of the rascal underwent a change. He started back as Tom mockingly remarked:

"Well, you're following us pretty close, Mr. Kilborn. How much did you have to pay for your landing permit?"

"I didn't pay—I don't know anything about it!" snapped the man, his face almost as red as his machine. "I can't help it if my route parallels yours. The air is free."

"But landing in Yarkand doesn't seem to be," went on Tom. "Your little trick cost me some money!"

"What trick? I haven't done anything. I —I——"

"There's no use in talking about it," broke in the young inventor. "I know what you did! But I held a trump card," and with that Tom went to the pilot house and gave the word to take off.

The machine was soon again soaring in the air and, looking back, Ned reported that the *Red Arrow* was also in progress.

"He's following us, Tom," the young inventor's financial manager stated.

"Let him come!" said Tom grimly. "If he tries any more of his tricks I'll not let him off so easily next time."

Wishing to put as much distance as possible between himself and his most dangerous rival, Tom signaled for some of the super gas to be used, and this so speeded up the motors that the *Red Arrow*, fast as she was traveling, was soon left behind, lost in the mist of the upper regions.

All that day and through the night, Tom Swift's powerful craft winged her way onward, covering mile after mile. When the pilot thought he had gained enough on Kilborn's craft

he changed back to the ordinary fuel, saving the powerful gasoline for another emergency.

It was shortly after breakfast, when Tom and Ned were taking some very much limited exercise by walking about the cabin, that Peltok, with a worried look on his face, came in to report:

"I'm afraid we'll have to make another landing, Mr. Swift."

"Land again? What for?" asked Tom.

"One of the carburetors seems to be choked and the adjustment of it is such a delicate matter that I don't believe we can do it in the air. We are constantly losing speed, and also getting off our course, as one motor is more powerful than the other."

"Well, if we must land, we must," agreed Tom ruefully. "But we are losing too much time. It can't be helped, I suppose. Go down, then!"

"Where shall we land?" asked Ned.

"Somewhere in China," was Tom's answer, as he looked at the route map.

A little later they floated down on a vast plain in a lonely region where there was not a habitation in sight and where there seemed to be no life stirring.

"I don't believe we'll be disturbed here," remarked Tom, as he got out of the machine, fol-

lowed by Ned. "It's as lonesome as the middle of a desert. Well, let's have a look at that carburetor."

He had no sooner got it disconnected from the feed line than he saw that extensive repairs were needed.

"It will take all of a day, maybe more," he said, with a sigh.

"Another day lost!" exclaimed Ned. "That's bad!"

"Oh, we'll make it up!" declared Tom, with a smile. "We've got some of that super gas left. I'm saving that for a grand-stand finish."

Since they were to be held in this lonely Chinese region for a day, the young inventor and Ned Newton planned to roam about and take matters easy while the three machinists made a new part for the defective one in the carburetor.

That evening, as Tom and Ned sat in front of the machine, they heard, off to the right, a roaring, pulsating sound which had a meaning for them. They looked in the direction of the noise, but on account of the mist could see nothing.

"An aeroplane, as sure as guns!" exclaimed Ned.

"And the *Red Arrow*, if I know anything about gasoline!" added Tom. "That's just how

her motors sound. Well, I hope Kilborn doesn't spot us held up here."

The sound of the throbbing engines died suddenly, and at this Tom sprang to his feet.

"He's shut off!" he exclaimed. "He's going to land!"

"Seems so," admitted Ned. "But he may not spot us," and as they had no sight of the rival plane, they concluded that the mist hid them as it also hid the *Red Arrow*.

"We'll stand guard to-night," decided Tom, and so watch was kept. But nothing happened during the hours of darkness.

The sun was scarcely up when Brinkley and Hartman rose, to resume work on the carburetor. But it was Ned who, looking out of his cabin window, uttered a cry of alarm.

"What is it?" asked Tom.

"Chinese bandits!" was the answer. "They're going to surround us! We're in for it now, Tom!"

As the young inventor peered out, he saw a horde of fierce-looking Chinese advancing toward the stalled airship.

CHAPTER XIX

THE TYPHOON

"TROUBLE surely is hovering over us!" grimly mused Tom Swift, as he leaped out of bed and hurried into the pilot house, where he found Peltok and the two machinists gathered.

"Can you speak the language of these bandits?" asked Tom of Peltok. For that the advancing Chinese were bandits there was little doubt.

"Oh, yes, I can talk to them. But it will do little good, I fear," was the answer. "They make it a practice to capture foreigners whenever they can, to hold them for ransom."

"And they're likely to capture us unless we can rise soon!" exclaimed Tom. "Can we?" he asked the machinists.

Brinkley shook his head while his companion said:

"It will take about two hours more to fix that carburetor and adjust it."

"Then we've got to fight!" said Tom. "All right, if they want that they can have it! Get

out the guns, Ned!" he cried. "Peltok, you man the ammonia tubes. Hartman, you——"

"Wait a minute!" advised Peltok. "I think if we drive the machine on her wheels in the direction of these bandits they may scatter. They are not as intelligent as the Yellow Gypsies. We can run on land with only one motor. It will be better than starting a fight, for it will take only a few bullets to damage the machine beyond repair."

"That's right," agreed Tom. "But do you think we can bluff 'em?"

"It's worth trying," Peltok answered. "I'll give them a word of warning!"

He leaned out of the pilot house window and shouted something which, as Ned said later, sounded like the back fire of an auto. The oncoming Chinese, none of whom were mounted, halted and talked among themselves.

"I told them," said Peltok to Tom, "that you would mow them down as a typhoon mows down a rice field if they did not scatter."

"What did they say?"

"They expressed some doubts, but I have them frightened. If you'll start the machine and open the cut-out so the muffler isn't working, I think they'll run."

"Better that than shooting them," declared Tom

It did not take long to start the land motor, and when the engine was warmed up Tom opened the cut-out, and such a staccato, rapid series of explosions resulted as to make it sound like a battery of machine guns in action.

There were surprised shouts from the bandits, and some of them started to run. A few however held their ground.

"Shave her nose right into the midst of them!" advised Peltok. "But run slow, and knock them down gently. Since the propellers are aft they will do no damage."

So Tom, guiding the craft, put her in motion toward a knot of the scowling Chinese bandits, some of whom seemed about to fire with their antiquated guns.

But when the bandits saw the powerful craft headed straight for them and when the foremost in the line were gently but effectively bowled over, rolling out of the way of the wheels just in time to save their lives, it was too much for the spirit of the rascals.

With cackling, shrill cries they turned and fled, and in a little while the plain was cleared of them. At this Tom Swift was well pleased, for he did not wish to take life, even of a bandit, if he could avoid it.

"Might just as well keep right on with the land motor," advised Ned when the way was

clear before them. "We can get to some place better fitted to stand off an attack than we were back there. And we'll be delayed a bit yet, sha'n't we?"

"I'm afraid we can't get that carburetor tuned up before to-morrow morning," Hartman reported. He was an expert on this particular part of a gasoline motor. "It wouldn't be a bad idea to get to some place where we'd have a hill at our backs," he added.

"All right," agreed Tom Swift, so he guided the craft for several miles across the treeless plain until they reached a plateau which they thought would be a good place to stop.

"Now, boys, make the best time you can on that carburetor," begged Tom of his mechanics when they were again at rest. It was decided that it would be wiser to lay to until the repairs were completed, rather than to try to make distance by traveling on land. The *Air Monarch* was not at her best climbing hills.

Though the delay fretted Tom, there was no help for it, and as the afternoon wore away and nothing further occurred to disturb the party, they had visions of taking off early in the morning and heading once more through the air on their course.

"An hour's work in the morning, and we'll be all set," announced Hartman as he and the

other two mechanics, weary with their labors, sought some much-needed rest. Peltok, who was a nervous, restless man, said he would stroll about a bit before turning in, and as Tom and Ned sought their bunks they saw him walking off in the darkness.

In spite of his anxiety over the delay, Tom Swift was soon asleep. How long he had slumbered he did not know, but he was suddenly awakened by some one shaking him and in the dim light of a small electric lamp in his cabin he saw Peltok bending over him.

"What is it?" asked Tom, starting up. "Is it morning? Are we going to leave now?"

"I don't know whether we can leave or not," was the answer. "We are in great danger. Listen. I walked out this evening and, most unexpectedly, I came upon a place where the *Red Arrow* is hidden in a glen."

"The *Red Arrow*?" cried Tom. "You mean Kilborn's ship?"

"Yes. She is right near by, and I believe he and his men know we are here. But that isn't the worst. Kilborn has hired a band of Chinese bandits to attack us just before sunrise, disable our plane, and capture us!"

"Are you sure of this?" gasped Tom.

"Very sure! I crept near enough in the darkness to overhear all the details. Kilborn was

talking to the bandits through an interpreter, and I heard all that was said. The bandits are angry because we repulsed them this morning, and they are eager for revenge. They promised Kilborn to attack us in force, to wreck our machine and to carry us off."

"The dirty rascal!" cried Tom. "What can we do?"

"If we could finish those repairs and be ready to start up before they got here, we'd trick them," said Peltok. And when Ned, who was aroused by the talk, heard what was in prospect, he too, advised the same thing.

"Then we'll do it!" decided Tom. "I hate to route Joe and Bill out of bed again, but it's got to be done."

Never a word of protest came from the two mechanics as they sleepily rolled out of their berths, and, with the help of Peltok and Tom, while Ned managed a flashlight, went to work adjusting the carburetor and fitting it in place.

"Now we'll try it," said Hartman when, toward morning, the last of the adjustments were made.

"But if we start the motors and they don't work," objected Ned, "won't those bandits, who must be camped near here and waiting, hear them and come to the attack?"

"We've got to chance it," said Tom.

Luckily, just as they began to make the test a violent storm, with heavy thunder, came up, and the sound of the motors' exhausts were drowned in the furious rumbles from the sky. The bandits heard nothing of the trial of the airship's machinery and, to the delight of Tom and his friends, the carburetor functioned perfectly.

"We're ready to go up now!" announced Peltok, as the first rosy tints in the sky denoted the coming of dawn. "Everything is all right. We're going up!"

"And here come the bandits!" cried Ned as, through the windows of the pilot house, he saw a crowd of Chinese advancing.

"Lively!" ordered Tom. "It's going to be touch and go!"

The motors roared as more gas was turned on. The *Air Monarch* trembled, seemed to cling for an instant to the earth, and then she began moving rapidly.

A cry of astonishment and rage burst from the bandits, who had not expected this. It was rapidly getting light. Tom was in charge of the controls and, waiting only until the craft had acquired sufficient momentum, he pulled on the elevating rudder handle.

"There's Kilborn!" shouted Ned, as he caught sight of the rascal who had come out to see how

his plot worked. He was yelling something, though what it was could not be heard, and he seemed to be urging the bandits to rush up and grab the airship before it could get fully off the earth.

But now the motors were warming up. The nose of the craft lifted. In desperation Kilborn yelled and waved his hands wildly. One of the bandits, directly in the path of the plane, made a jump and grabbed a rope that had, inadvertently, been left dangling. He caught it and was lifted up in the air.

"We're taking him with us!" cried Ned, leaning out of the window to observe.

"That's his lookout!" said Tom coolly.

But the Chinese bandit had no relish for being taken from his home in this strange fashion. With a yell, he let go the rope when he was ten feet up, and down he fell.

"Wow!" yelled Ned, with a laugh of delight. "He got his all right!"

"Who?" asked Tom, who was guiding the plane up higher and higher, out of danger.

"Kilborn," was the answer. "That bandit fell squarely on top of him, and they both went down in a mud puddle! Oh, baby!" and Ned chuckled in delight while grins of satisfaction spread over the faces of the others.

Tom looked down in time to see the discom-

fited pilot of the *Red Arrow* picking himself up from beneath the bandit, his clothes dripping mud and water, and then the *Air Monarch* shot on her way.

The remainder of that day was one void of excitement. They traveled in the air over the vast extent of China, making only one descent to get some oil, as a leak developed in one of the reservoirs, allowing much of the precious fluid to drip away. They had a little trouble with the Chinese authorities in the city where they landed. But this was not due to any scheming on the part of Kilborn. It was just a local "squeeze" custom, and Tom had to pay out money for graft. But he said he did not mind as long as he was ahead of the *Red Arrow*, and he felt sure that he was.

It was the middle of the next day, when they were about to leave the region above land, once more to sail over water, that Tom observed the barometer falling.

"Does it mean anything?" asked Ned, as he saw the serious look on his chum's face.

"A storm, I'm afraid," was the answer. "And a storm here, in the region of the Japan Sea, is anything but pleasant."

"Bad?" asked Ned.

"The very worst," was Tom's reply. "But we may be able to get above it."

He increased the speed of the motors and headed the *Air Monarch* in a different direction. But the glass continued to fall. The sky soon became overcast and there was a dead calm, as they could tell by looking down on the surface of the sea, which was as flat as a mill pond.

But not for long.

Suddenly there was a puff of air that swerved the craft, powerful as she was, to one side. Then came a howl as from some mighty siren whistle. Tom, who had given Peltok charge of the steering wheel, sprang to aid him as the spokes were almost torn from his hands. At the same time the young inventor cried:

"Typhoon! Typhoon! It's going to hit us hard!"

Then, in spite of all efforts to keep her nose up, the airship began shooting down toward the surface of the sea that was now lashed into foamy waves by the power of the awful wind!

CHAPTER XX

MALAY PIRATES

TYPHOON in itself has a sinister sound, and when, coupled with that, was the knowledge of what such a storm was capable of doing, it is no wonder that there were anxious hearts aboard the *Air Monarch*.

"What's the matter?" asked Ned of his chum, as he realized that Tom was not going to be able to do as he hoped and send the craft up into a calm area above the outburst.

"I don't quite know," was the answer. "It's just as if we were being pulled or pushed down."

"If we land in that sea—well——" Ned did not finish, but Tom knew what his chum meant. If it was bad in the air it was worse on the water.

A typhoon is a hurricane of the worst sort, this particular name for violent wind and sea disturbances being common to China and Japan where these storms rage from May to November, being at their worst in the summer months. Tom and his party had arrived just at the very

height of the stormy season, and were now in the grip of a typhoon of the most dangerous character.

"Our only chance is to fight it!" cried Tom, while he aided Peltok in handling the wheel. "Once we are forced down, we'll be swamped."

The craft was built to navigate on water, it is true, but not amid big waves and swells kicked up by a hurricane. Yet it might chance that Tom would have to battle with the elements of water as well as those of the air.

For a time it seemed that the typhoon would conquer and force the machine down. At first Tom thought something had gone wrong with the machinery, so reluctant was his ship to respond to the controls. But when he looked at the wind gage near the front window and noted that its hand was hovering around the 150 mark on the dial, he understood what was taking place.

The wind was approaching a rate of two hundred miles an hour, and as the *Air Monarch* was not making that speed she was being blown back, and her propellers were not even holding her stationary in the gale. Not only was she being forced back, but she was being forced downward.

"We've got to have more power!" cried Tom. "Turn on the super-gas!"

"There isn't much left," said Hartman. "You were to save that for the last lap!"

"There won't be any last lap if we don't get above this typhoon!" shouted Tom. "Turn it on!"

"On she goes!" echoed the mechanic.

With Hartman at the super-charger, while Tom and Peltok managed the wheel, Ned and Brinkley looked to the oiling systems. If they failed now, when it was necessary to run the motors at their top speed, it would be disastrous.

Though the wind howled about them and heavy rain now dashed against the thick plate glass of the windows, and though the typhoon was increasing in power, it was soon evident that the machine was doing better. With the increase in speed and power of the motors, because of Tom's newly invented gas, the *Air Monarch* began to recover lost ground, and soon she began progressing straight into the teeth of the hurricane. To have turned and sailed before it would have meant that she would be turned over and over, her wings shorn off and that she would be dropped into the raging sea, a helpless wreck.

"We'll make it! We'll make it!" exulted Tom, as he saw the speed indicator hand slowly move along until it was passing the two hundred mark. He knew his ship was capable of over

two hundred and fifty miles an hour, or more than four miles a minute, though how long she could keep up this speed was a problem. And the young inventor knew he could not hope to reach that goal with a typhoon blowing against him at more than half that speed.

So Tom was satisfied when he saw his craft making a little more than the two hundred mile rate, and he had hopes of coming out of the contest not only with a whole skin himself but with his plane intact.

Howling and yelling, the wind threatened to tear the machine apart. But the *Air Monarch* was stanchly made, and she forged ahead. Now and then some more violent outburst than usual caused the craft to dip down toward the raging sea, but Tom and Peltok forced her up again, and she rode above the waves, though sometimes perilously close to their crests.

There is one thing about typhoons that is in their favor, if such a thing can be said. This is that they do not last long. From the very nature of these storms, they cannot last long.

So, after about half an hour, there was a diminishing of the force of the hurricane, as Tom could note on the gage, and he was able to send his craft up higher, soon being in a region of comparative calm.

"Oh, boy! That was some blow!" Tom con-

fided to Ned, when he could let Peltok manage the wheel alone and the young inventor went to get some rest in the main cabin with his chum.

"I'll say it was!" Ned echoed. "Do they have many of these out here?"

"More or less. We're well out of that one."

The typhoon was passing almost as quickly as it had arisen, and when it was possible to slow down the motors, to save as much as possible of the now precious super-gas, Tom gave orders to that effect.

They were now over a portion of the ocean that had not, as yet, responded to the whipping and lashing of the terrific wind, and Peltok, who had given Hartman charge of the wheel, came in to say:

"I think we had better drop down to the water and give the airship an overhauling. No telling what might have been strained by that gale."

"I agree with you," Tom said. "We'll make a landing, or rather," he added, with a smile, "a watering. There is a large island near here, I think," he went on, consulting the map, "and we can be sheltered in the harbor if we have to make any repairs."

The typhoon had passed. The rain was over. The setting sun came out clear and bright from behind the black clouds as the *Air Monarch* gently settled down in the sea near a large

island, with smaller islands clustered about it.

"Pleasant place, this," remarked Ned.

"It looks so," agreed Tom. "I hope we find nothing wrong and can soon be on our way again. We have lost a lot of time."

"And we're likely to lose something else, too!" suddenly exclaimed Hartman, as the craft came to a stop at the entrance to a natural harbor on one side of the large island.

"What's the matter?" asked Tom, who was shutting off the motors.

"Look!" exclaimed the mechanic, and as he pointed ahead Tom and his friends saw, swarming toward them, a number of long, low boats, filled with savage warriors who set up a hideous howling.

"Malay pirates!" cried Tom, recognizing the natives. "We'll have a hornet's nest about our ears in a minute! Malay pirates!"

On came the savages chanting a war song to keep time with the flashing paddles as they urged their boats toward the floating aeroplane.

CHAPTER XXI

AMONG THE HEAD-HUNTERS

"WHAT shall we do, Tom?" exclaimed Ned, as he stood beside his chum, regarding the pirate flotilla. "Going to fight? Better turn on the ammonia tubes! Let's get out the machine gun!" One of these weapons had been brought along. "We can stand them off!" and Ned started back to the rear of the cabin where the weapons were kept.

"Wait a minute!" ordered Tom Swift. "I don't believe we'd better shoot, Ned!"

"But, man alive, why not? They'll kill us if we don't. Look at their savage faces!"

"They're regular fiends!" said Peltok. "They'll not only capture us, but they'll torture us before they eventually kill us. This tribe is one of the worst of the Malay pirate bands!"

"I haven't the least doubt of it," assented Tom. "But at best we can kill only a few of them before the rest will swarm over us."

"There's something in that," agreed Hartman. "But still we shall have to do something.

They'll capture the ship if we don't! Get down off that!" he yelled as one of the boats was suddenly paddled forward and a Malay, horribly decked out in war paint and feathers, leaped up on one of the plane's wings. Impulsively Hartman jumped outside and pushed the pirate off the airship into the water, where he fell with a splash.

This did not disconcert him, however, for the Malays were like fishes in the ocean, and he swam back to his canoe while his companions laughed.

At this Tom Swift's face brightened and he exclaimed:

"We have a chance. Any tribe, no matter how savage, that can see the funny side of life is open to reason."

"Do you mean you're going to reason with these fellows?" asked Ned. "What's the idea? We can't hang around here making those fellows laugh and getting them into good humor so they'll let us go. If you're going to win this race, Tom——"

"I'm going to do my best to win it," was the answer. "But harsh measures may be the very worst sort we could adopt. I have an idea we can escape from these pirates by a little strategy."

"What kind?" Ned wanted to know.

"I've got to work out a plan," Tom answered. "Meanwhile, how will this do to impress them?"

Without waiting for his chum to answer and not consulting the others, Tom went to a chest in the corner of the cabin and took out a small black globe. From it dangled the end of a fuse, and to this Tom set a match.

"Going to bomb them?" asked Ned. "Good! I'd never thought of that! But I thought you advocated peaceful measures."

"This will be peaceful enough," Tom said with a smile, looking out on the ever increasing flotilla of Malay canoes. So closely were they now clustered around the airship that it would have been impossible for her to have gotten up speed enough to taxi across the water and to rise in the air. The engines had been shut down, and it seemed that the *Air Monarch* was at the mercy of the pirate horde.

"A peaceful bomb!" cried Ned. "That's one on me. But be careful where you throw it, Tom, or you may damage us more than you damage those imps. Though I'd like to see 'em all blown sky high!" he added vindictively.

"They won't be blown far with this," remarked Tom Swift, as, noting that the fuse was almost burned down, he hurled the black object through the open window straight into the midst of a number of canoes.

There was a yell of surprise from the pirates as they saw the object, with its faint trail of smoke, coming toward them. A moment later there was a little explosion, hardly louder than that of a fire-cracker, and a great cloud of smoke floated over the scene, hiding the pirates from view.

"I get you now!" yelled Ned. "A smoke bomb such as they use in the movies! We'll escape while they are blinded by the smoke."

"No, not exactly," Tom said. "The smoke will hamper us as much as I hope it scares these pirates. I only want to impress them and lay pipes for another demonstration later. I brought some of these smoke bombs along to use for signaling, but they may serve another purpose."

Indeed, this one seemed destined to act that way, for from the midst of the heavy cloud of white vapor came yells and cries of fear and astonishment. Meanwhile, those in the airship waited for Tom's next move.

"This will give them the idea that we are a supernatural bunch, I hope," said the young inventor. "They'll hesitate about rushing us, and that's what I want—to hold off that overwhelming rush."

Tom Swift seemed likely to get his wish, for when, after a minute or two, the smoke screen was blown away, the water about the *Air Mon-*

arch was clear of pirate canoes. The paddlers had hastily drawn back from too close proximity to the "foreign bird-ship," as, doubtless, they called the craft.

But if the danger of an immediate and overwhelming rush was over for a time, the menace of the Malay horde still remained. For though the canoes had withdrawn to a respectful distance they still hemmed the aircraft in, and it would have been impossible to get headway enough to rise without crashing into part of the flotilla. This might kill a number of the pirates. It was also likely to damage the *Air Monarch*.

"Here comes the chief. I think he wants a parley," said Peltok, as the largest canoe of all, much bedecked with feathers and other ornaments, shot out from the midst of the boats and was paddled toward the aircraft. On a raised platform amidships sat a fat Malaysian surrounded by his attendants. One of them began shouting something to which Peltok listened attentively.

"He's the chief, all right," he translated to the others after an exchange of talk between himself and the Malaysian. "He says he will let us depart in peace if one of us will remain to be offered as a sacrifice."

"A sacrifice!" cried Tom. "A sacrifice to what?"

"To one of their heathen gods," Peltok announced. "It seems the tribe has had bad luck and they think their god should be propitiated. A white man as a sacrifice will do the trick, that Malay chap said. That smoke bomb scared them," he went on. "They can see that we have great power. But still they are not enough impressed to let us go free, though they say they will withdraw their boats and let us go on our way if one of our party is handed over for sacrifice."

"And if we refuse?" asked Tom.

"Then they will rush on us and kill us all, no matter how many of them we may kill," translated Peltok. "Thus will their god be appeased and fortune will smile on them, the chief says."

"They're desperate enough to do just that," said Tom. He seemed lost in thought for a moment, and then he added: "Tell them we will let them know in the morning. Hold them off until after dark," he added. "By that time we'll have had a chance to go over our motors and be ready for a rush."

"But it will be dangerous to crash through those canoes," objected Ned.

"Maybe there won't be any canoes left when we get ready to leave," replied Tom, with a smile. "Go ahead, Peltok, tell them we will decide by morning."

Again there was an interchange of words in the Malay tongue, and when there was a pause Peltok turned and said:

"They agree. If by morning you will donate one of the party to sacrifice they will give us free passage over their sea. If not, they will kill us all!"

"There are two sides to every story," quoted Tom. "Ours yet remains to be told. Come on now," he urged his companions. "Let's get busy on the motors. They may not need much tinkering with. But we'll tune them up and be ready for the dash."

While the mechanics were making some adjustments, which fortunately proved to be very few, Ned asked Tom:

"What's the game?"

"Fireworks," answered the young inventor. "I've got a few I brought along, Ned, not really knowing what use I might make of them. But now I see a chance.

"To-night," went on Tom, "when we are ready to start, I'll shoot some rockets and Roman candles over the heads of the Malays. They'll probably be surrounding us in their canoes. But the fireworks will scatter them and we'll have a clear lane to shoot through."

"Good!" cried Ned. "I wondered what you

were going to do. This will turn the trick, I think."

Though the triple ring of canoes had withdrawn a little distance from the airship, the big craft was still so well invested that unless the rings were broken escape would be out of the question.

Darkness fell rapidly. Tom and Ned got a meal ready, serving it to the mechanics who were working fast to complete the adjustments made necessary by the strain to the ship caused by the typhoon.

It was nearly midnight when Tom, having got out the fireworks, made ready for his surprise. With the help of his four friends, he laid a battery of rockets in wooden troughs so they would shoot in four directions from the airship. Then, directly ahead, in the path he intended to use to get up speed to mount into the air, he aimed some big Roman candles.

"All ready!" cried Tom when Ned and the others had announced that they were prepared. "Let 'em go!"

With terrifying roars, with sharp explosive pops and showers of sparks, the rockets and Roman candles whizzed forth. The darkness was set aglow with a terrifying glare, and from the watchers in the canoes came yells of dismay.

"Start the motors!" cried Tom when, by means of the red glow, he saw the canoes scurry away, leaving a free passage.

With a roar, the powerful machines got into action, the propellers whirled, and the *Air Monarch* shot across the water.

A few seconds of this ever increasing speed enabled the craft to rise into the air, and then she was on her way, winging her flight high over the heads of the terrified and disappointed savages.

"That will hold them for a while!" cried Ned, as he aimed the last burning balls of his Roman candle down on the dark mass of fleeing natives.

All through the night the machine roared on, reducing each hour the distance that separated her from the final goal. There were still many thousands of miles to cover, however, and several days would be needed to do this.

It was on the third day after having escaped from the Malay pirates and while proceeding along over the Pacific that the machine which Tom was guiding swerved sharply to the left. It almost turned turtle, but he righted it quickly and then shut down the power.

"What's the matter?" shouted Ned.

"We're wrecked, I'm afraid," was the answer. "One of our propellers is broken. We've got to descend! I'll head for that island!"

"No! Not there! Not there!" cried Peltok, who had been studying the charts just before the accident. "Don't go down there."

"There's no help for it," said Tom. "But what's the objection?"

"That island is inhabited by head-hunters!" was the answer. "They are even worse than the Malay pirates!"

"It can't be avoided!" said Tom Swift. "We're disabled. We'll have to take our chance!" and a few minutes later he guided his craft down into a little natural harbor of the island, the shores of which swarmed with savage-looking men.

CHAPTER XXII

THE RAFT

SCARCELY had the aircraft come to a stop, gliding over the water, than scores of canoes, smaller than those used by the pirates, but containing fully as many savages, put out from the sheltered shore of the little bay and began approaching the machine housing Tom Swift and his party. Their horrid cries rent the air and they brandished their spears, axes, clubs and bows and arrows.

"What are we going to do, Tom?" asked Ned. "Are you going to fight them or scare them?"

"You can't scare these natives!" shouted Peltok. "They are utterly savage. They have no gods. They worship only human heads, and they are after ours."

"Then we won't waste any time parleying," decided the young inventor. "Unlimber the machine gun!" he called to Hartman and Brinkley. "Ned, get out the rifles! If they want to fight we'll give 'em one!"

"But what if we can't beat 'em off?" asked

Ned, as he ran to get some of the arms. "We'll be stuck here sha'n't we, with one propeller gone?"

"We'll be stuck if we can't ship a new one, but we have two spares," said Tom. "We've got to fight these head-hunters off—that's all there is to it!"

Realizing how desperate was their situation, the party, one and all, resolved to die fighting rather than fall into the hands of the evil savages.

The machine gun was set up on its tripod just outside the motor room, on a small platform which was hastily screened in by some boxes, chests and movable lockers. Hartman and Brinkley, who were to work this automatic weapon, would thus be protected from the spears and arrows of the head-hunters. Luckily the islanders did not seem to possess firearms.

Tom, Ned and Peltok would take their stand in the front cabin and fire on the savages from there. No sooner were these measures of defense taken than the head-hunters rushed to the attack, yelling, shouting, and brandishing their weapons.

There was quite a party of them coming up in canoes at the stern of the floating airship, and Tom, seeing this, yelled to the machine gunners:

"Let 'em have it!"

A moment later the automatic began its staccato roar and the bullets fairly riddled several canoes, sinking them, spilling their warriors and paddlers into the water, and killing numbers of them.

But while the rear attack was thus repulsed, there was a rush toward the front and sides. There the savages were met with a sharp fire from the rifles of Tom, Ned and Peltok, and great execution was done.

With yells of dismay at this hot reception, most of the canoes that were not disabled swung back, but one containing half a score of natives dashed on and bumped against the fuselage of the aircraft. Screaming and brandishing their weapons, the occupants tried to swarm up the slippery metal sides.

"Repel boarders!" yelled Tom, rushing out, followed by the others.

Despite a flight of arrows and spears, one of which latter wounded Peltok and Ned slightly, the three drove the invaders back, firing in their very faces, and actually kicking some of them off into the water. Then this canoe turned back, but not before several of the occupants had been killed.

"Good work!" cried Tom, turning to go back to the shelter of the cabin to avoid more arrows and spears which were now showering toward

the *Air Monarch*. "A little more of this and we'll have them on the run."

As he spoke he uttered a cry of pain, for an arrow took him in the thigh, inflicting a painful wound.

"It may have been a poisoned arrow, too!" said Peltok. "Better put some disinfectant in the wound." This Tom did, in the shelter of the cabin.

After the first rush the head-hunters withdrew, their ardor somewhat cooled. But Tom and his companions knew the fight was not yet over. The canoes still hung about and more savages were coming to the coast from the interior of the island. Some of them bore freshly severed heads, and it was a foretaste of what might happen to Tom Swift and his party should they be captured.

Meanwhile, Hartman and Brinkley had used the machine gun to such good advantage that they had repulsed the savages at the rear with great loss, though both machinists had been slightly wounded by arrows.

All five of the airship occupants were now hurt, but none of the wounds amounted to much save in the case of Tom Swift, and he made light of his pierced thigh. It was, however, very painful.

"What are we going to do?" asked Ned, who

was beginning to lose heart when he saw the increasing crowd of savages and realized that the airship was disabled.

"Do?" cried Tom. "Why, we're going to carry on, of course! It will not take long to attach a new propeller, and we'll have to fight off these imps while it's being done. Hartman and Brinkley can do the work, while you and I, Ned, with Peltok, will stand guard."

This program was carried out, though under great difficulties. The head-hunters, in spite of their heavy losses, returned to the attack soon after the two machinists began attaching the spare propeller. The old one had lost a blade, possibly through some defect in it, Tom decided.

Ned and Peltok worked the machine gun at the stern, thus protecting Hartman and Brinkley from an overwhelming rush, while Tom, with several magazine rifles ready to hand, peppered the natives who sought to come at the craft from the front.

In this way the fight and repair work went on for a couple of hours, until, at last, the execution among the head-hunters was so great that they were forced to withdraw. Ned received another slight scratch from an arrow, but there were no other casualties on board the *Air Mon-*

arch, which was rapidly being put in shape for another flight.

It was not until late in the afternoon, however, and following a most strenuous hour, that the machinists announced that the propeller was in place.

"And it's about time, too," said Tom. "I think the head-hunters are going to make another grand rush."

This was plainly evident from the additional canoes that were being filled with islanders who swarmed down to the shore. They seemed determined, no matter how severe their own losses, to get the heads of these strangers.

Peltok tried to listen to the shouted talk of the savages, but had to admit that they spoke a dialect unfamiliar to him. However, it was evident that the yells and shouts had to do with the intentions of the war party.

"Here they come!" yelled Ned, when word had been given to start the motors. "Wow, what a mob!"

Hundreds of the head-hunters were now paddling to the attack. But when they were within range they were met with a sharp fire from the rifles and machine guns. At the same time the *Air Monarch* began moving, and before the attackers could get close enough to interpose their

canoes in her path, the machine had risen and was soon high over their heads and out of danger.

"Whew!" whistled Ned as they sailed on. "If we don't get the prize for the international race, Tom, we ought to get one for an international globe-circling fight. We've had a lot of it since we started."

"Yes, we have," Tom admitted, wincing a bit as he moved his wounded leg. "And we may have more. We still have Kilborn to reckon with."

"I wonder where he is," mused Ned as the machine straightened out on her course.

"Hard to say," was the answer. "But we aren't making as good time as I'd like to make. He may pull in ahead of us."

At the thought of this the speed of the craft was increased and as night came she was winging her way over the vast expanse of the Pacific Ocean toward the shores of the United States.

It was just at dawn the next morning when Ned, who had got up early to make Tom a cup of coffee, looked down toward the sea. What he saw caused him to cry out.

"What is it?" asked his chum.

"There's a raft just below us."

"A raft?"

"Yes, with a couple of people on it. Looks

like a raft from a wrecked ship. I think they are castaways. Can't we rescue them, Tom?"

The young inventor came limping out of his cabin to look down at the sea. Rising and falling on the heaving swells below the *Air Monarch* was a big raft, on which were two men waving frantically to those sailing above their heads in the airship. Faintly their cries floated up, for the *Air Monarch* was flying low.

"Help! Help!" the castaways shouted.

CHAPTER XXIII

THERE SHE BLOWS!

TOM SWIFT for a moment was torn between duty and ambition.

His machine was winging along at wonderful speed and he was beginning to make up for much time lost. To slow up, descend and rescue these two on the raft meant more delay—a delay that would be dangerous to his chances of winning the prize. He did not know how many or what other ships, whether of the air or the sea, containing his rivals, might be ahead of him or close behind.

But it was for only a moment that Tom hesitated. He gave one look down at the despairing, helpless men on the raft and cried to Ned: “We’ll go down!”

Ned knew, as well as Tom, what this might mean.

As the young inventor sprang into the motor room to give the order to Hartman, who was on duty, he practically gave up all hope of winning the race. Yet he had no regrets.

There was another thought that came to Tom as he told the surprised Hartman what was about to be done and mentioned the raft with the shipwrecked ones on it. This was the problem of caring for the two castaways when they were taken aboard the *Air Monarch*.

"There's hardly room for them," reasoned Tom. "Their added weight will hold me back, even if I'm able to make up any of this lost time. And we haven't any too much food. Didn't have a chance to lay in any at the camps of the pirates and head-hunters," he grimly reflected.

But he did not hesitate, and a little later two very thankful, but much wondering, men were being taken aboard the airship. They were thankful for their rescue but surprised at the manner of it.

"We thought some steamer might pick us up," said one, "but we never counted on something coming out of the sky to do it."

"Sam thought I was out of my head when I told him an airship was coming," remarked the other.

Tom had sent his craft slowly over the water on her pontoons as close as he dared to go to the raft, and the men had leaped into the sea, swimming the intervening distance, since it would take but a slight bump from the jagged

edges of the raft to puncture the frail body of the *Air Monarch*.

Once on board, and again riding through the air, Tom listened to the stories of the cast-aways. They were part of the crew of a small lumber schooner that had broken up in a terrible storm. For more than a week the men had been drifting about on the raft which had been made from some of the deck load of lumber. Five of their companions had been washed off, and one, in delirium, had leaped into the sea and was eaten by sharks. The two who were left had only a little food and water remaining when they were saved.

"I'm sorry that I can't take you men all the way back to San Francisco with me," Tom said, when the two had been made comfortable in temporary bunks and given some extra garments in place of their wet and storm-torn ones. "But I'm trying to win a race. How would it do if I landed you on one of the Hawaiian Islands? I've got to stop there for oil and gas."

"That would suit us fine, Captain," said Sam Stout, while his companion, Frank Madler, said:

"We can easily get another ship there."

So it was arranged, and Tom, still with a faint hope in his heart that he might at least come in a good second if not the winner of the

world race, turned on a little more power and headed for the east. There lay the United States, and once over that territory there remained only the last part of the flight—across the continent.

The motors of the *Air Monarch* were not behaving as well as Tom liked, and he had an idea it was due to the poor quality of the last gasoline he had put into his tanks. He dared not use the last of his super-fuel, but he hoped in Hawaii to get some better than the last.

If worse came to worst, he thought he could finish the race in his *Airline Express* craft, but he wanted to do it in the *Air Monarch*. It would be much more satisfactory, he told Ned, who agreed with him.

It was only half a day's travel from where the shipwrecked ones had been picked up to the harbor of Honolulu, and it was about mid afternoon when Ned, who was on watch, gave the cry:

"Land ho! All out for Hawaii!"

The beautiful islands were looming ahead of them through the mist. Quarter of an hour later they made out Diamond Head and knew they were close to Honolulu, the chief city of the territory.

Tom was in the pilot house, prepared to make a landing, if such a term is permissible when

one means to drop into the water. He had headed the craft for a spot somewhat outside a harbor, intending to taxi up into it to avoid the shipping when, suddenly, Sam, one of the shipwrecked sailors, who was looking from the pilot house window, pointed to a spot directly in front of them and cried:

"There she blows!"

"What?" asked Tom, though a second later he realized what was meant.

"A whale!" cried the sailor. "There she blows, and you're going to bump right into her!"

Tom tried desperately to shift the wheel and, at the same time to elevate the airship to pass over the monster of the deep. But they were now so close that it seemed impossible. With the motors shut off the sound of the whale's blowing could be heard and each moment the vast bulk became plainer. If the airship hit that mountain of flesh she would be instantly wrecked!

CHAPTER XXIV

THE LAST TRICK

"START the engine! Give me some speed!" Tom yelled desperately. "I've got to zoom!"

He meant, by this, a sudden and sharp lifting of the airship over the whale, as a birdman often zooms to avoid crashing into trees or some obstruction.

Luckily, Peltok was on duty in the engine compartment. He had shut off power but a short time before, and the cylinders were still hot. In a second the machinist switched on the spark, hoping to start the motors on compression as can sometimes be done. To his delight it happened this time.

With a roar the powerful engines started up, whirring the propellers and giving the craft enough momentum for Tom to lift her over the whale's back.

But so little room was there to spare that afterward, observers in near-by boats declared that the spouting of the whale wet the lower portion of the *Monarch*.

Tom could well believe this, for when the big creature, alarmed by the near approach of the air craft, raised its flukes and slammed them down on the surface of the sea, preparatory to sounding, the water was washed in a big wave over the rudders of the *Air Monarch* tearing loose some of the stays and guy wires of the elevating surfaces.

It was a narrow escape, and Tom realized this as, a little farther on, he brought his craft safely to the calm surface of the bay while behind him the waves were ruffled by the sinking of the whale that was soon lost to sight.

"If this keeps us," remarked Ned whimsically, as he sat on a locker, "I'll be a nervous wreck after this race. It's just one bit of excitement and narrow squeak after another."

"We have had a little more than our share," admitted Tom. "But I think the worst is over now."

"You sure handled your ship like a veteran!" commended the two shipwrecked sailors.

Tom's arrival at Honolulu was greeted with a great demonstration on the part of officials and the populace, some of whom had expected that one or more of the world racers might pass over their islands. So when word came that Tom had stopped to take on gasoline and oil, arrangements were made to fête him. But he

had little time for any ceremonies although he did consent to be decked with a wreath of flowers—a native custom.

"I want to hop off again as soon as I can," he told the welcoming delegation, though as politely as possible. "You understand how it is."

"Oh, yes, we understand," was the reply. "But one of your rivals is here, and he seems to be taking his time."

"Who is it?" asked Tom, though he was almost prepared for the answer that came.

"Dan Kilborn in the *Red Arrow*."

"Here ahead of us!" exclaimed Ned.

"That isn't to be wondered at!" remarked Tom. "The thing for us to do is to leave ahead of him and keep him at a distance."

They learned that the *Red Arrow* had arrived two days before with a broken cam shaft and that the repairs were nearly completed. On hearing this Tom hastened as much as he could the taking on of gas, oil, and other necessities. But when it seemed that they might get under way again a few hours after landing in Honolulu, Peltok discovered another small burned-out bearing that must be replaced.

"It will not take long," he said, "as we have spare parts for that. By night we can be moving again."

"I hope so," murmured Tom.

The two shipwrecked sailors were taken in charge by the captain of a vessel who promised them berths, and Tom and Ned sent home radiograms telling of their progress up to date.

In spite of Peltok's assertion that it would not take long to replace the burned-out bearing, it did, and he had to amend his calculation so that it would be midnight before the *Air Monarch* could take off again.

Tom and Ned occupied their time by visiting places of interest, and it was when they were coming out of a restaurant that they saw a crowd approaching them. Thinking it was only curious ones who wanted to look at the "world fliers," the two young men paid little heed until they heard a voice they knew saying:

"There's Tom Swift now! Arrest him! I'll make the charge!"

Tom and Ned wheeled about to see Dan Kilborn facing them. The pilot of the *Red Arrow* was in company with a police officer, and again he exclaimed:

"Arrest Tom Swift!"

"On what charge?" asked the officer.

"He tried to kill me!"

"Kill you!" shouted Tom. "Are you crazy?"

"No, I'm perfectly rational!" sneered Kilborn. "But I make that charge. A charge of

attempting my life! Tom Swift dropped from his airship a Chinaman on my head, severely injuring me."

And then it came to Tom and Ned what the rascal meant. He was referring to the time he had set the Chinese bandits on to wreck the *Air Monarch*. One of the bandits had been carried up by catching hold of a rope as Tom sent his craft aloft, but the frightened fellow had loosed his hold and dropped on Kilborn's head.

"Arrest Tom Swift!" again demanded the *Red Arrow* pilot.

As he hastened forward, so did the police officer, accompanied by a number of others.

"I am sorry," said the officer to Tom, "that I shall have to take you into custody. There must be a hearing, but probably, since no one was really killed, you will be admitted to bail."

"You mean that I must submit to arrest and probably lose a day, if not more, arranging for bail on this untrue charge?" asked Tom indignantly.

"Such is the law," was the answer.

"It's a foolish law!" cried Ned. "It was Kilborn's own fault that the Chinese bandit dropped on him. He sent them to attack us!"

"I did nothing of the sort!" declared Kilborn brazenly.

"I must take you into custody, young man,"

said the officer. "I am sorry, but this gentleman," and he pointed to Kilborn, "has sworn out a warrant against you, charging you with assault with intent to kill. I must do my duty."

"All right," assented Tom, with such seeming cheerfulness that Ned looked at him curiously. "If I have to go with you I suppose I must. But this is your last trick, Kilborn!" the young inventor suddenly cried. "I'm going to play trumps from now on! Follow me, Ned!"

With a sudden motion Tom tripped the officer who had reached out a hand to apprehend him. He pushed the man backward into the midst of his fellows, and then sent a fist full into Kilborn's face, whirling him aside.

Then, like a football player, Tom turned and ran back into the restaurant, followed by Ned, who did not know what to make of it.

"They'll trap us in here, Tom!" panted his chum.

"No, there's a back way out that leads directly to the beach!" whispered Tom. "I noticed that when we were in there. Come on. We can beat Kilborn yet!"

On they rushed, through the midst of the astonished waiters and patrons in the dining room. Out through the kitchen they went and into a back alley. Tom had marked the way well, and in a few minutes, leaving a confused and yell-

ing crowd of men behind them, the two reached the harbor, and, engaging a motor launch by the simple but effective method of shoving gold coin into the owner's hand, were soon aboard the *Air Monarch*.

"How about it?" gasped Tom to the workmen. "Can we start?"

"At once, if there is need!" answered Peltck.

"There's the greatest need in the world if I'm going to win the race!" cried Tom.

A minute later the *Air Monarch* rose.

CHAPTER XXV

ACROSS THE CONTINENT

"WELL, Tom, what do you make it?"

The young inventor and his chum were in the snug cabin of the *Air Monarch* which was speeding over the last few hundred miles of the Pacific that lay between her and the Golden Gate. Tom was poring over a chart and making some calculations.

"If we reach San Francisco by night, and we ought to do it at the rate we're traveling, we'll have used up nearly eighteen days of the twenty."

"That leaves you one day to cross the continent," remarked Ned.

"Correct," agreed Tom. "But we'll have to stop in Frisco to take on more gas and oil. After that we'll have a straight-away run to New York."

"And victory," added Ned.

"That remains to be seen," replied Tom.

It was the day after the sensational escape in Honolulu from the trumped-up charges of Kil-

born. The *Air Monarch* had got away to a flying start, though what Kilborn had done remained a matter of conjecture. Doubtless, tricked by Tom's quick action, the *Red Arrow* pilot had also completed his repairs and was racing after his most dangerous rival.

"With good luck, no more delays and fair feather, we'll just about do it," Tom said, putting away the maps and calculating tables and instruments as they neared San Francisco. They had arranged for a landing field there—the same field that Tom used for his *Airline Express*, though he did not now consider using that machine, since the *Air Monarch* was doing so well.

It was evening when the great craft, going fast, passed the Golden Gate amid a salvo of whistles from all sorts of craft in the harbor, for scouting aeroplanes had discovered Tom's approach and heralded it. Out to the landing field without mishap the *Air Monarch* soared, and there willing hands assisted in making a few slight repairs and in filling the gas and oil tanks.

"We'd like to have you address our Chamber of Commerce," said the president of it to Tom, as that young man was nervously walking about his craft. "We have our annual meeting this evening and——"

"Sorry," cut in Tom, with a smile. "But I'm going to hop off at once. I have only about a day left of my allowance, and there's too much at stake to take any time here. If I win this race I may fly back and give you a talk."

"I wish you would," said the president.

At last everything was in readiness, and while police were clearing the field that Tom might have a runway to get a start for taking the air, there echoed above the *Air Monarch* a throbbing and beating in the night. It was a sound the nature of which Tom and Ned knew only too well.

"There goes the *Red Arrow*!" cried Tom, recognizing the peculiar throb of his rival's propellers. "He's ahead of us!"

In vain Ned sought to pierce the blackness above for a sight of the other machine. He could see a dim blur of light, and that was all.

"Cast off! Let's start!" cried Tom, and a moment later, amid shouts of farewell and cries of good luck, the *Air Monarch* started on the last lap of the twenty-five-thousand-mile journey around the earth.

"Think we can make it, Tom?" asked Ned.

"We're going to try," was the answer.

But as Tom, during the night that followed—the last night of their flight—looked at the barometer, he shook his head a bit dubiously.

"I'm afraid we're going to run into a storm when we hit the Middle West," he said.

That is just what happened. Through the night the *Air Monarch* soared on, crossing the Rockies and heading for the East. When dawn broke the occupants of the craft found themselves navigating in the midst of a swirling storm of wind, rain, and, at times, beating hail.

"Some storm!" cried Ned, as the fierce wind careened the aircraft. "Will it hold us back, Tom?"

"It's bound to, somewhat, but it isn't as bad as the typhoon or the hurricane."

There was an anxious look on the young inventor's face, however, and Ned guessed that it was caused as much by the thought that Kilborn in the *Red Arrow* was ahead of him as it was by the storm. The *Air Monarch* might beat the storm, but could she beat the rival plane?

On and on raced Tom's craft, until at last she was clear of the storm which had done its best, but in vain, to hold her back or cripple her.

"Pittsburgh!" shouted Ned, who was marking off the principal cities as they flew over them.

"Four hundred miles more to New York and victory!" echoed Tom.

It was shortly after noon. A hasty meal had

been served. In about two hours more, if all went well, the race would be over. The twenty days were not quite up. Tom Swift still had a chance to win the twenty thousand dollars for Mr. Swift. Would he also win the prize money?

Suddenly, through the mist in front, Ned caught sight of another plane, traveling in the same direction as the *Air Monarch*.

"Look, Tom!" the financial manager cried.

Tom leveled a glass at the other craft.

"It's the *Red Arrow*!" he yelled. "And she's limping. We've got a chance to beat her! Turn on the super-gas. We've got just about enough to finish the race!"

In an instant the powerful new gas Tom had evolved was turned on, and at once the improvement in the pace of the *Air Monarch* was noted. Tom had been saving his precious fuel for just such an emergency as this. He gave the *Red Arrow* a wide berth in passing her, lest perhaps Kilborn, in his rage at seeing himself about to be beaten, might try to ram Tom's craft. Then the mist closed in again and it is probable that those on the *Red Arrow* did not know the *Air Monarch* was passing, unless they heard the throb of her propellers.

On and on rushed Tom Swift and his friends. One hour passed. In less than sixty minutes they would be in the neighbor-

hood of New York City and could glide out to the Long Island landing field.

"If this mist would only let up!" complained Tom. "We may over run the field in the fog!"

Passing Pittsburgh and other cities, messages had been dropped, to tell the committee in charge of the race the *Air Monarch's* progress and let them know the approximate time she would arrive. He also hoped his father, and perhaps Mary, would be on the field to greet him.

Suddenly the mist cleared away and Ned, looking down, saw the tall and jagged skyline of New York's big buildings.

"We've arrived, Tom!" he yelled.

"Not quite yet! A few minutes more!"

Tom steered with a clear vision now, out toward Long Island. The airship had been sighted, and a din of whistled greetings arose from the harbor.

"Stand by to land!" cried Tom a little later, as he glimpsed the field he had left nearly three weeks before. A big crowd was with difficulty kept out of the danger zone.

"And the *Red Arrow* isn't in sight!" exulted Ned.

Down to the ground floated the *Air Monarch*. Her wheels ran over the sod and she came to a stop within a few feet of where she had taken

off. Cries and cheers greeted the returning voyagers.

"Tom! Tom!" yelled Mr. Damon, rushing out of the crowd as Tom, Ned and the others stepped from the plane. "You win! Bless my alarm clock, but you win!"

"What was our time?" asked Tom, as he greeted the eccentric man and then noticed Mary coming toward him with her father and Mr. Swift.

"Nineteen days, eleven hours, fifteen minutes, eleven seconds," was the answer of the official timekeeper. "I congratulate you, Mr. Swift. You have won the hundred thousand dollar prize!"

"And your father wins his bets!" echoed Mr. Trace who, with Mr. Burch, had arrived in time to see the landing. "I didn't believe it was possible to circle the globe in less than twenty days."

"We had several narrow squeaks!" admitted Tom, as he paused to allow the news reel men to make moving pictures of him.

"Oh, Tom, I'm so glad you're back!" murmured Mary. "And I guess Helen is glad to see Ned, too," she added, as Tom noticed his chum being greeted by another pretty damsel.

"Has anything been heard of any of the other contestants?" asked Tom when his time had

been officially set down. "How about the *Red Arrow*?"

"Hasn't been heard from," some one said. "And most of the others gave up soon after starting."

Just then a reporter came bursting into the crowd.

"The *Red Arrow* just crashed in New York harbor!" he cried. "She's a wreck!"

"Too bad!" murmured Tom. "We didn't get here any too soon," he added to Ned. "Whew, but I'm tired!" And well he might be, for the last part of the trip had been a terrible strain.

The *Air Monarch* was wheeled into a hangar and left in charge of the three mechanics while Tom and his friends, after a reception in New York, made ready to go back to Shopton.

Meanwhile further news came of the wrecking of the *Red Arrow*. Her motors, worn by excessive strain, had collapsed just when Kilborn might have given Tom a close finish, and the machine, a complete wreck, fell into the water. Some of her crew were seriously hurt, and it was thought her pilot would die.

Under this impression Kilborn made a complete confession, admitting that he had set Hussy and another man on not only to steal Tom's secret if possible, and, failing in that, to try to cripple Tom and disable the *Air Monarch*.

But all their evil plans came to naught. Tom did not press his charges, and Hussy was released, but his employer, Kilborn, was discredited in the eyes of every one and Tom, acclaimed a hero and a sport on all sides, received the hundred thousand dollars.

One of the first things he bought with the prize money was a fine diamond pin for Mary.

"Just a souvenir!" Tom explained.

"Some souvenir!" murmured Ned. But then he did not need to be envious, for he was given a large share of the prize money by Tom, and was able to get a souvenir for Helen.

Peltok, Hartman and Brinkley were also well rewarded for their part in helping win the great race.

"And I won a bit myself," admitted Mr. Damon, when matters were being talked over. "But bless my phonograph," he said, "don't tell my wife. She doesn't believe in making wagers. Only I'm glad you won, Tom!"

"I'm a bit glad myself," laughed the young inventor.

THE END





